

THE PSYCHIC RESEARCH QUARTERLY

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We do not feel that any apology is needed for introducing THE PSYCHIC RESEARCH QUARTERLY to the public. Interest in our subject is almost universal, and there is an unmistakable and increasing demand for trustworthy information about it—a demand which, at the present time, is very imperfectly satisfied. The official publications of the various Societies for Psychical Research are of the first importance to students, but they are comparatively inaccessible and are often obscured by a mass of necessary detail which makes them anything but easy reading. As a consequence of this, most people derive their knowledge of the subject exclusively from the lay Press or from professedly Spiritualistic journals. Of these, the former is commonly concerned with effect rather than with accuracy, while the latter are already committed to definite solutions of many of the most important problems involved.

There is, moreover, a serious lack of reasoned criticism and discussion; for, although attacks on the Spiritualistic position are common enough, it is very unusual for those who launch them to display even the slightest knowledge of the relevant facts. We hold no brief for Spiritualism—on the contrary, we believe that it is possible to make out a very strong case against it—but it is impossible reasonably to maintain that there is *no* plausible foundation for its doctrines.

It will be as well to make clear just what our view of the present situation is. We believe that the problems of Psychical Research are among the most intricate and the most important with which the human intellect has ever grappled—quite the last which any prudent

man should select as a subject for dogmatic pronouncements. Among them is the task of determining the true causes of a variety of phenomena which, *prima facie*, appear to be due to the continued activity of deceased persons. It is no use saying that such an origin is impossible or absurd; the matter is one for evidence, and for evidence alone—including, of course, legitimate *a priori* considerations—and those who have most critically and thoroughly studied the subject are the first to admit that the evidence in favour of this "spiritistic" view is of a very high order both in quantity and quality. This evidence may be inconclusive, as we ourselves are inclined to believe; it may, on closer examination, prove definitely unsatisfactory; but only ignorance or prejudice will deny its existence.

We believe, further, that it is by no means so easy to account for the facts in terms of "Telepathy" or "subconscious mental activity" as some critics seem to imagine; any competent Spiritualist can produce perfectly reliable evidential matter which these facile theories will fail to explain. There is, indeed, no simple formula which will enable us to give a neat cut-and-dried explanation of every evidential fact. The true case against the spiritistic view is rather that our knowledge of what the incarnate human mind can achieve on occasion is not yet sufficient to warrant our assigning definite limits to its powers—powers which modern Psychology has already shown to be much more extensive than we once suspected. Until we can fix these limits with reasonable precision it is rash to claim that a given phenomenon transcends them and must therefore be due to discarnate influences. This objection is admittedly vague, but we believe that it is valid and, at the present time, insuperable. But Psychology—the science of mental states—is making rapid progress, and it may well be that a few more decades will see the issue definitely settled. The importance of a positive solution, were it to be obtained, needs no emphasis from us.

In the meantime we shall give our readers every opportunity of forming their own opinions by publishing the best obtainable contributions to the problem from all sides. In addition to accounts of contemporary researches by the most reliable authorities, and criticisms thereon, we shall include articles dealing with the light thrown

on the subject by such other sciences as normal and abnormal Psychology, Theology and Philosophy.

It must not, however, be supposed that this problem of the Survival of Death is the only one with which Psychical Research deals. There are many phenomena—such as “Dowsing,” which is described by Sir William Barrett in this number—which have nothing to do with it at all. The same may also be said of Telepathy, and even if, as the Spiritualists claim, such phenomena as those studied by Dr. Crawford of Belfast are ultimately due to the activity of discarnate agents—which is doubtful—the immediate mechanism of their production provides quite a separate field of inquiry and a very interesting one. Such phenomena will be dealt with in subsequent numbers.

The fact remains, however, that the problem of the Survival of Death and the credentials of Spiritualism are, for the majority of people, the most interesting and important questions with which Psychical Research is concerned, and, whether we like it or not, Spiritualism is a force in the modern world which cannot be ignored. It may be a Heaven-sent revelation, or a peculiarly subtle machination of the devil; it may be wholly a delusion, it may be merely immature; there may be the germs of a new conception of the Universe in it, or there may be nothing. But many thousands of people believe in it to a greater or less extent, and it is well that the great mass of educated persons who, in such matters, constitute “public opinion” should know something of its true strength, weakness and dangers, should be able to distinguish between the serious elements in it and mere silly accretions, and thus be in a position to accept, modify or reject it for the proper reasons.

SCIENTIFIC METHOD IN PSYCHICAL RESEARCH

By F. C. S. SCHILLER, M.A., D.Sc.

IF man were a rational being, or if even he realised how irrational he is and endeavoured to comport himself as rationally as he could, the investigations grouped together, rather roughly, under the collective name of *Psychical Research* would assuredly be one of his great interests, and would appeal with irresistible force both to the scientist and to the man in the street. Even if scientists would only devote themselves to the duties plainly incumbent on them, much might be done. If, *e.g.*, the average logician were what he ought to be, namely, interested in the method of science and the attitude of mankind towards knowledge, instead of being entirely and unapproachably wrapt up in the sterilities and puerilities of formal logic, and the futilities of a metaphysic whose vision of human affairs is so far out of focus that it cannot see truth in anything short of *The Whole* (which may not be knowable by us, and is certainly not known), he would assuredly find no study more fascinating and enlightening than that of *Psychical Research*. For there is none which illustrates so well so many logical problems and pitfalls, and reveals so perfectly both the motives and the difficulties of our cognitive endeavour, and the hopes and fears which beset the birth of science. Similarly, if the ordinary psychologist had faith enough in his science to realise that it need not shrink from works and ought in the end to be practical, setting before itself as its ultimate goal nothing less than the making into something beautiful and harmonious the human soul, brutalised and thrown out of gear, quite as much as developed, by the fierce struggle for existence and its lurid past, he would gladly study its manœuvres and machinations when it approaches a subject which both attracts and repels it, and would observe how this subject is enveloped in a mass of prejudice and illusion, of social tabu and *camouflage*, that grows into an impenetrable screen to shut off from the dormant soul of man the immensities of the cosmic vistas.

To an unprejudiced student of human nature, on the other hand, the subject is full of stimulating paradoxes and enlightening revelations. Why is it, for example, that we do not yet know what happens to us when we die? Seeing that the belief in souls and in their survival of death, and in the possibility of communicating with the departed, is one of the very earliest of human beliefs, why has it remained a mere article of faith? It may be granted, no doubt, that, like all beliefs of the religious order, it is primarily the expression of a spiritual craving, but that is no reason why it should not be capable of scientific investigation and found to be true. For the evidence alleged on its behalf, though not scientifically recorded, was always empirical and capable of being rendered experimental, and amenable to scientific testing. Why, then, has it neither been proved nor disproved in all these thousands of years?

Why, moreover, is it that no sustained attempt ¹ has been made to do either, until now? It may be that the world is now ripe for a really thorough scientific ventilation of the matter; but, if it is, it will not be because man's traditional and normal attitude has changed, but essentially because the times are abnormal and unprecedented. Never before in the world's history has there been so strong a will to know scientifically; never before, alas, such an intensity and wide diffusion of the "bereavement sentiment." ² Hence the inertia and obstruction which have hitherto frustrated psychical research may possibly be overcome, and the facts be scientifically ascertained.

That they have not been ascertained as yet was certainly not for lack of evidence. As far back as we can trace them, men have told ghost stories and circulated tales of marvels. This sort of evidence is probably as abundant as ever; its defect is not in quantity. Neither, strictly, is its quality such that it can be safely disregarded. For though it does not, of course, come up to scientific standards, it is as good as could be expected under the circumstances and in face of the slipshod and unsystematic way in which it is recorded. Its quality is quite as good as was that for many beliefs, say in "thunderbolts"

¹ I do not count the work of the Society for Psychical Research as such an attempt, *as yet*, though it is by far the most considerable effort of the sort. For I consider that the very moderate amount of support both in men and money which it has received only accentuates the poignancy of the question.

² As I showed in my discussion of the answers of the Questionnaire of the American Branch of the Society for Psychical Research, this sentiment involves a will to know, though it demands a positive answer. At any rate, it is *not* content to "leave it a matter of faith." Cf. *S.P.R. Proc.*, Pt. 49.

(= globular lightning), which turned out to be true enough when they were investigated scientifically. The trouble about it is that it belongs to the sort of evidence which is not convincing—to *all*. It is only convincing to *some*, namely, to those who are willing to believe, or (occasionally) who are willing to entertain the possibility of belief. As, however, there are very many whose minds do not fulfil these conditions, the evidence cannot convince, and its appeal is not universal.

As, moreover, the logicians have made the hasty assumption that all minds are constructed on the same pattern, and that whatever is true must be so “universally,” this fact alone suffices to render the evidence suspect and unpalatable to logicians. They should therefore be summoned to observe that the evidence for the topics of *Psychical Research* is not unique in this respect. It shares this peculiarity with many other subjects. Thus the evidence for the truth of a religious creed does not appeal to all; which is why no religion is literally “catholic.” A political argument is hardly ever found to convince the partisans of the opposite party. A man who has egregiously committed himself on one side of any question is rarely to be persuaded that the truth lies on the other. Any man who has become an “old fogey” (as we all do if we live long enough, though some fossilise much earlier than others) may be trusted to regard with disfavour the “new-fangled notions” which have come into vogue since he stopped learning.

In all these cases, and, indeed, probably in *all* cases of knowing to some extent, “reason” encounters “bias,” and gets worsted. Now it is evident that the presence of bias enormously complicates every problem of knowing. The most obvious thing to say is to declare that bias must be extirpated at all costs. But apart from the fact that this cannot be done in practice, it leads straight to the theoretic absurdity that the best attitude for the inquiring mind is one of total indifference towards the subject of inquiry. Besides, none of those who advocate this policy really wishes to eradicate the desire to know (which must, of course, always produce a bias in favour of a *positive* result), nor would he deny, if he reflected, that its intensity is a valuable asset in the search for truth.

As, then, we cannot get rid of bias, we must guard against it. We can control it to a great extent by becoming conscious of our own bias and exposing that of others. In difficult questions, where a conflict of bias is an essential part of the problem, we may have to resign ourselves to the prospect that in all probability, whatever science can do or undertake, different minds will continue to differ. Does anyone,

e.g., seriously suppose that there will some day be discovered an irrefragable refutation of Conservatism or of Liberalism? It would not be astonishing, therefore, if the intensity of feeling evoked by the topics of Psychical Research should render universal agreement on the matter for ever unattainable. There will probably always be some who will have good reasons to hope that there may *not* be a future life—for them. But this is no reason why we should not try to know, and to know as scientifically as we can.

The prevalence of bias in these matters has of course long been recognised. I need merely call to witness an American psychologist who was recently allowed to try a little Psychical Research by Harvard University. "With respect to the problems of psychical research," he says,¹ "practically no person exists who does not possess a strong bias, in one direction or another." His testimony is valuable because it recognises also the existence of a bias *hostile* to Psychical Research, the power of which it is essential to allow for, if one wishes to understand the history of the subject. As, moreover, one hears far more about the bias of credulity and the will to believe than about their opposites, it will be well for us to keep a watchful eye on what has proved itself to be, on the whole, the stronger bias, and to bring to light the obstacles it has put in the way of scientific Psychical Research.

It is on account of this hostile bias that the psychical inquirer has had to fight so hard for the right to research, and has still to conduct his campaign on two fronts. Not only has he to contend, like other inquirers, against the obscurity of the facts and the complexity and deceptiveness of nature; he has also to maintain his "home front," and to win permission to inquire from the society he lives in. So much so, that hitherto the latter has been his chief concern. Until a few generations ago an inquirer into the "occult" *par excellence* literally took his life in his hands, not by reason of the diabolical repugnance of any supernatural "Dweller on the Threshold," but on account of the fiendish violence of his fellow-men. Not only was the social atmosphere hostile to his enterprise, but it expressed its disapproval in the most ferocious fashion. There was nothing too monstrous and absurd to believe about him, nothing too atrocious to do to him. From the centres of "civilisation" to the wilds of Africa "witchcraft" was a statutory crime, and the burning of witches legally convicted of this capital offence was a popular entertainment. Can we wonder that

¹ L. T. Troland, *A Technique for the Experimental Study of Telepathy* (1917).

such treatment neither improved the temper of the magician nor conduced to his scientific progress? It is astonishing rather that he hit upon so many promising ideas, and that, *e.g.*, chemistry has but recently had to acknowledge his prescience in experimenting with the transmutation of metals, and even in suspecting that lead and gold were akin.¹ But the magician had little leisure for the prolonged experimentation and calm inquiry which science nowadays requires. He had to devote most of his time and ingenuity to escaping from the attentions of the mob and the police.

Nor, be it noted, has this treatment of Psychical Research ever been officially disavowed. The old laws against witchcraft are still on the Statute Book. The beliefs and feelings that inspired them are still alive. The Roman Church, for example, still condemns investigation as "necromancy," and conceives it as communion with the devil. It would not be at all difficult in many countries to organise a "pogrom" against "mediums," and in others to get visits to them proscribed under "Dora," like the use of cocaine.

Still, on the whole, the traditional social animus against Psychical Research was slowly abating. It lingered on in the academic world, because that is everywhere organised so as to penalise novelties and adventures of thought; so if a professor was rash enough to evince any interest in a subject that was not respectable, it would promptly be whispered that he "had gone off his head."²

But even here the virus of social hostility had become much attenuated—thanks mainly to the eminent respectability with which the S.P.R. conducted its researches. What scholar, *e.g.*, could fail to feel the appeal of messages from the dead that were chiefly composed of recondite references to the classics? By devising the highly complex and ingenious, and in no wise popular, method of "cross-correspondences," the S.P.R. at once rendered such communications academically respectable, even as Freud rehabilitated the ancient art of dream-interpretation in the eyes of the medical profession by interpreting in terms of sex. Indeed, it is hardly too much to say that the greatest achievement in Psychical Research with which the S.P.R. is so far to be credited was just this making of the subject respectable enough for serious research. For that was the first and

¹ Cf. Soddy, *Science and Life*, p. 132.

² I have myself heard this asserted about Sir William Crookes, Henry Sidgwick, and William James.

indispensable step to discovery, which the students of the occult had never succeeded in taking before.

Then came the war, and produced first a "slump" in Psychical Research, and then a "boom." Now the rare infelicity of the times and the imperious demands of multitudinous sufferers seem to have swept away the prejudices and hesitations, the fears and insincerities of the majority. The "bereavement sentiment" is no longer felt only by a small fraction of the population; it demands social recognition, and refuses to be thwarted any longer. The present vogue of Psychical Research is not surprising to any psychologist who has taken the trouble to study the nature of human sentiment.

But the "bereavement sentiment" is transitory. It is also, scientifically speaking, selfish, in that it aims rather at personal consolation than at the increase of knowledge. It will leave the scientific question very much where it was, unless it can be well advised and wisely guided. If it is so guided it may yield what it has never before been possible to get, namely, the provision of resources for systematic Psychical Research, on a scale worthy of the magnitude, importance, and difficulty of the inquiry. The leaders of the spiritualists and of the S.P.R. therefore have a great responsibility; they *must* impress on their followers that the object to be aimed at is not personal consolation so much as scientific proof; and to that end they must untiringly explain to them that scientific proof is arduous and slow and cumulative and co-operative, and, above all, *expensive*. They should be warned explicitly that they must not expect to solve the mystery of human destiny by paying a guinea to a "medium" and being told something that impresses or staggers them.

Unfortunately the nature of scientific proof is hardly understood either by the public or even by professed logicians. The public still believes that "mathematical demonstration" is the *ne plus ultra* of cogency, though modern mathematicians are under no such illusion. They understand that it has only the hypothetical certainty of a coherent system of assumptions and the practical value of a well-chosen one. The logicians mostly allow their dreams of absolute proof to blind them to the method of science, and mislead both the scientists and the public.

It is necessary, therefore, to realise distinctly that there are three methods in Psychical Research which *cannot* lead to scientific proof, and also a fourth which may end in such proof, but cannot end in absolute certainty.

(1) The first and most pretentious of these is metaphysical and *a priori*: it promises absolute certainty without the tedious prolixity of observation and experiment. But it cuts both ways, and can as easily be used to disprove as to prove any object of belief which it is not desired to inquire into. Thus Hume's argument against "miracles" was just as metaphysical as the *a priori* "proofs" of the soul's immortality; both begged the question in the definition of their terms. Similarly Mr. Hugh Elliott has recently based his rejection of Psychical Research on his metaphysical materialism, and declared argument and evidence useless.¹ In short, appeals to metaphysics (unless the metaphysics are conceived as hypotheses to be empirically tested) either beg a question or a definition, and argue in a circle from the meaning of words—which is supposed to be fixed. But as these meanings have grown up gradually through man's dealings with reality and change accordingly, this supposition is *false*, and the value of such verbal reasoning is no greater than that of the empirical evidence by which it was moulded. Also the plea by which an absolute sanction is claimed for metaphysical beliefs always conceals the same impossibility. It is always advanced in the form of a *threat*. "You *must* accept my metaphysical doctrine, for *no other* is rationally thinkable: if, therefore, you reject it, you destroy the rationality of the universe." To which the answer is, that even if the premisses were true (which they never are), it would only follow that *up to date* no other and better metaphysic had been excogitated; from this conclusion it would be fallacious to infer that none ever could be. Even, therefore, if there were *only one* metaphysic instead of as many as there are philosophers, it would be false that it *alone* could conceive knowledge as valid and the world as intelligible: to make such a claim, merely because one had not been able to think of a better, would involve the formal fallacy of "affirming the consequent." Metaphysics, then, are purely obstructive from a scientific point of view. They deserve a mention merely because so many suffer from metaphysics without knowing it.

(2) The idea of settling the question for good and all by a single conclusive case which would be so perfectly recorded and so skilfully arranged that all sources of error and doubt would be excluded is a far more attractive ideal. Indeed, we must all sympathise with the ambition of reaching a final and absolute fact which no scepticism can

¹ In the *Quarterly Review* for January, 1920.

corrode and no criticism pick to pieces : it is such an incitement to carefulness of observation and ingenuity of experiment. But experience shows that crucial experiments are not to be had for the asking, and finality can hardly come before the end of knowing : so to expect to realise this ideal in so peculiar a subject as *Psychical Research* would be quixotic.

In the first place, it is evident that no final *disproofs* of any alleged supernormal happening is possible or even conceivable. A negative result only proves that under the precise conditions of the experiment nothing happened, and this cannot show that under *other* circumstances it might not happen or has not happened. And as the precise conditions can never be repeated, excuses can always be made to explain away the failure. A sufficiently robust will-to-believe need never logically surrender to any amount of negative evidence. In ordinary affairs, no doubt, we mostly have common sense enough to allow consistently negative results to undermine even our dearest prejudices. But with subjects of the emotional interest of *Psychical Research*, this will hardly occur. There will always be found stalwarts enough to cling to their scientifically discredited beliefs, and to dispute that a final decision has been reached.

Secondly, it is practically impossible to exclude all the sources of error in a single case. They become too multitudinous when nothing may be taken for granted and anything may be alleged. Fraud, malobservation, self-deception, inaccuracy, mendacity, bad faith, and (in the last resort) coincidence, may be alleged to any extent by the sceptic against all the parties to the experiment. Even if they could all be guarded against, he would blandly declare, " Well, I can't say *what* was wrong about it ; but why has it happened *only once* ? I want to see it done again ! "

Thirdly, even if the facts could be established beyond all possibility of cavil, they would still remain ambiguous. Their significance would depend on the interpretations put upon them. And these are so various and so extreme that the value of the facts would be wholly indeterminate. In the case, *e.g.*, of messages purporting to come from the dead, the interpretations range from the devil to the Deity, *via* telepathy from the living ; and all these agencies are conceived as unlimited enough to account for anything. Our theories to apprehend the facts are at present too vague to render them intelligible.

Lastly, even if we admitted that the evidence in a single case was irrefragable now, it could not long remain so. The tooth of time would

at once begin to gnaw away its value, and as memories grew dim and witnesses died and records perished and new sources of error or doubt were discovered or devised, its cogency would quickly fade away. History is full of marvels which no one now believes, and in a few generations belief in the "irrefragable fact" would become as optional as in the other facts of history. Decidedly, then, a fact cannot get itself established once and for all, and then rest on its laurels: to maintain itself as fact it must continue to be active.

(3) Shall we, then, despair of carrying the citadel of truth by a single *coup de main*, and betake ourselves to the slow pressure of a regular siege? Shall we bombard it with a series of cases, not singly unexceptionable or cogent, but all supporting and corroborating each other, until in the end the most obstinate sceptic yields to their cumulative force? There is much to be said for this policy. Though unpretentious, it is practicable, and can be started at once and upon any evidence, and continued as long as necessary. It is true also that the evidence accumulates, and improves in quality as it is more promptly and conscientiously recorded. But will these merits suffice to disarm the sceptic? He has a fatally easy way of avoiding conviction. He has merely to refuse to let the evidence accumulate, and to insist on taking each case on its own merits separately. He can then attack it as if it stood alone, urge all its flaws against it, disregard all corroborations and analogies, and dismiss it as incredible, unintelligible, and worthless, without regard to the existence of other "facts" which are all similarly vulnerable. Hence Mr. Elliott is quite entitled (on his own assumptions) to deprecate "the mere piling up of fresh instances"; they may strengthen the case, for such as are open to conviction, but they cannot prevail against too hostile a bias.

(4) What, then, remains? The only possible procedure that can lead to scientific proof in Psychical Research, as in the empirical sciences, is to accept the guidance of Scientific Method. Now Scientific Method is essentially hypothetical, *i.e.*, experimental. It treats all "facts" as data to be tested, all "principles" as working hypotheses to be confirmed, all "truths" as claims to be verified. All allegations, therefore, must be tested, and are valued according to the scientific consequences to which they lead. At the outset, therefore, Scientific Method is content with provisional conclusions that are not greatly trusted, and to the end it is never content with decisions that cannot be revised and improved on, if occasion should arise. At the same time, it is recognised that the human mind does not respond to the infinite

gradations of logical probability, but declares itself satisfied and certain so soon as the evidence for a belief seems to it adequate. After that the question is humanly settled—unless and until something occurs to reopen it. For there is no absolute *chose jugée* in science.

Now among the tests of a scientific belief the severest, the most convincing, and ultimately the most important, is its application to reality. The question, "Can my belief be brought to the test of fact and acted on? And when I act on it, can I trust it not to disappoint my expectations?" is the severest of all the tests of belief, because it mercilessly sweeps away all the make-believe, the half-beliefs, the self-deceptions and illusions which some minds in all subjects and all minds in some subjects so much prefer to a courageous facing of the facts. It is therefore fatal to pseudo-sciences like, *e.g.*, astrology. If a man professes to believe that the date of a man's death can be calculated from a knowledge of the date of his birth and of the conjunction of the planets at that time, he can fairly be summoned to act as if this knowledge had a very direct application to the life insurance business. If he doesn't, it may justly be inferred that his belief is, at most, a half-belief, and that his real state of mind resembles that of the Scotsman who was willing to take his dying oath to the truth of an improbable assertion, but not to bet sixpence.

The pseudo-scientific attitude, moreover, is not confined to the pseudo-sciences. In all subjects, from metaphysics to mathematics, it is possible to indulge in the spinning of hypotheses, in the stringing together of abstract *formulae* without regard to consequences, without end or purpose or consideration of whether they have any concrete meaning or any application to reality, and if so to what. Scientific Method makes short work of all this sort of thing, by insisting that inapplicable doctrines are in truth unmeaning. Hence such beliefs, and I fear it must be admitted that they are evoked not infrequently by the objects of Psychical Research, naturally fight shy of so stringent a test, and postpone or evade the dread day of application.

On the other hand, such of them as *do* apply are thereby purged of error, and confirmed in their claim to truth. One of the most impressive documents I have ever come across in Psychical Research was a form of contract stating the terms upon which a firm of well-sinkers who employed a "dowser" were prepared to find water in a supernatural manner. For it showed such a calm confidence in the reality of "dowsing," that one could not but reflect that business people would

not accept the principle, "No water, no pay!" unless they were actually able to find water thus.

The test of application then is most convincing, because it is psychologically impossible to maintain an attitude of theoretic distrust towards ideas and beliefs which are found to work in practice. The electrician cannot doubt the reality of electricity as he turns his "current" on and off, nor the biologist that of life, as he watches its growth and decay, even though neither the one nor the other knows what "electricity" and "life" really are. Whether we like it or not, we have to recognise that the ultimates of science are known to us only in their operations and not *per se*. Most of us, however, fortunately find it quite easy to adjust ourselves to this situation: when we can predict and control whatever are reputed the ultimate agencies of our time, we feel that we know them so far as we need.

Now this same scientific temper could be, and should be, transferred to the subjects of *Psychical Research*. For it is clear that they have manifold applications to reality by which they can be tested, and that success in application would speedily raise them above all possibility of cavil. For example, "telepathy" would cease to be doubtful as a force in nature if it could be controlled like "electricity," and if the telepathic transmission of information could effectively compete with the telegraphic or wireless. More than fifteen years ago I pointed out, in the first number of the *Occult Review*, that this was the one effective way of establishing the reality of telepathy. I must, however, regretfully admit that in this direction no progress has been made: we know as little as ever about the conditions requisite to put a mind into a state in which it can receive or transmit "telepathic" impressions. This would be highly discouraging if it were clear that there had been any serious and prolonged research: but apparently nothing of the sort has been attempted.

Nevertheless, it is no wonder that under the circumstances the pragmatic argument from the "working" to the truth of beliefs, which has been set forth above, has been turned against the belief in anything supernormal. Mr. Hugh Elliott¹ roundly declares that telepathy "for practical purposes of business is plainly non-existent, and yet immense fortunes would be amassed by anyone who could use it for a practical end. Consider how different the course of the war would have been if we could have tapped off by a telepathic method the minds of the German generals." He also points out that "huge

¹ *Loc. cit.* p. 87.

financial interests are at stake," and that in practice telepathy is not found to be a "satisfactory substitute for the letter post." All of which is true enough, though Mr. Elliott is mistaken in supposing that no one had anticipated him in pointing out these uses of telepathy. He is mistaken also in supposing that this settles the question. For hitherto no sustained attempt has been made to develop the applications of Psychical Research, for the reason that there has been a fatal lack of co-operation between the scientific researcher and the general public. The scientific researcher, having had his proper motive wrongly represented to him as "pure love of knowledge for its own sake," has felt himself free to follow the promptings of his own curiosity, and resented social attempts to direct him towards "utilitarian" or "popular" subjects. So he naturally overlooked the logical value of the application test, and the need of something more than random investigation. The general public, on the other hand, though it was conscious of the ends it aimed at, and of the uses of the supernormal knowledge it desired, had no idea of the first steps to be taken, of the patience that was needed, or of the magnitude and difficulty of the inquiry.

The result was an *impasse*, something like that which blocked the advance of Physical Science throughout the Middle Ages. Hence the analogy of scientific history would seem to demand another Bacon, whose trumpet-call may summon mankind to the assault on a new realm of knowledge, as great or greater than the physical. It may well be that the present crisis in human affairs will form an adequate stimulus and arouse men to do away with the anomaly that they either cannot or will not investigate the very problems that concern them most. If so, Psychical Research, here or in America, will be adequately equipped and put upon a permanent footing. For as I have endeavoured to point out,¹ there are now "millions who have been cruelly and abnormally bereaved and deprived of those in whom their hopes were centred," while there is also "keen dissatisfaction with the evasive platitudes of conventional creeds, by which all societies have from time immemorial cheated the longing of the freshly-wounded human heart not to be totally severed from those it loved," and while "nevertheless the critical spirit is strong enough in many not to rest content with consoling deceptions."

If, in consequence of this unparalleled condition of the world, an organisation for research like the S.P.R. can be properly endowed and

¹ *Proc. S.P.R.*, Pt. LXXVI., p. 270.

enabled to enlist an adequate number of trained professional workers, they may any day have the luck or ingenuity to hit upon a clue that will give them control of some essential phenomenon, and thereafter will make rapid progress, because they will be able to experiment at pleasure. It would not, however, be surprising, and should not be discouraging, if the first clues led nowhere and the first analogies proved false. It should never be forgotten that the efforts of physicists to find a clue to physical happenings proved abortive for thousands of years, and that the Mechanical Theory which finally led to success in the hands of Descartes, Galileo, and Newton had been declared illusory by Plato and Aristotle.

The truth is that the making of a science is a much more protracted, arduous, and precarious business than we are willing to admit. The road to success is always paved with the serviceable fragments of multitudes of erroneous theories that have perished in the attempt. And in this case all the inherent difficulties of the enterprise are multiplied tenfold by the pitfalls and obstructions inserted by the interferences of bias on both sides. It will long be necessary to verify most carefully every assertion on either side and to presume that every bit of evidence has been polarised by prejudice until the contrary is shown. It follows that under such conditions no test can be made really convincing except the most exacting of all, the pragmatic test: the world at large will not really and truly believe that mind can communicate with mind directly, or that the departed are not wholly dead, until the *routine* of ordinary life includes the sending and receiving of telepathic messages, and of communications from (and to) the "dead," which are so common and so well authenticated by their consonance with their earthly personality as to leave no practical doubt that they are what they claim to be, and *not* the work of self-deception, subliminal memories, devils or cosmic Absolutes. Or, in other words, until the ultra-physical world has been rendered continuous with the world we live in, and this world and the "next" practically interpenetrate.

THE SO-CALLED DIVINING (OR DOWSING) ROD

BY SIR W. F. BARRETT, F.R.S.

IN the Library of the British Museum and other places there is a valuable old Latin folio, entitled *De Re Metallica*, written by G. Agricola, and published in Basle about 1546. This is one of the earliest works on mining ever published, and is a well-known and classical treatise. In that volume is to be found the first authentic description of the use of the forked dowsing-rod (or *virgula-furcata*, as Agricola calls it) in the search for underground ore. There is an interesting full-page plate of the dowser at work, which is here reproduced on a reduced scale,¹ and in the text Agricola points out the difference between the use of the *virgula-furcata* and the ancient superstition of the *virgula-divina*, by which name the forked twig was also called. Evidently Agricola has some faith in the former, and rightly ridicules the latter.

The first account that I can find of the use of the *virgula* in England is in one of the essays of that famous man the Hon. Robert Boyle, published in 1663. Boyle was one of the founders of the Royal Society of London and the father of experimental science. It is significant to find that what we have been accustomed to regard as pure humbug, a relic of a superstitious age, is first brought to our notice, with some evidence in its favour, by two distinguished scientific men of their day. Boyle's description is worth reading; a summary of the essential part is as follows:—

“A forked hazel twig is held by its horns, one in each hand, the holder walking with it over places where mineral lodes may be suspected, and it is said that the fork by dipping down will discover the place where the ore is to be found. Many eminent authors, amongst others our distinguished countryman Gabriel Plat, ascribe much to

¹ Like other old woodcuts, the successive operations are all shown in one plate. The dowser is seen cutting his rod, and at A he is marching over the hills in a businesslike way; at B the rod has “struck,” later on the ore is dug, and the proprietors are pointing out the result with evident satisfaction.

this detecting wand, and others, far from credulous or ignorant, have, as eye-witnesses, spoken of its value. When visiting the lead mines of Somersetshire I saw its use, and one gentleman who employed it declared that it moved without his will, and I saw it bend so strongly as to break in his hand. It will only succeed in some men's hands, and



those who have seen it may much more readily believe than those who have not.”¹

From this it would appear that prospecting for ore by means of the forked hazel twig must have been in use in England for some time

¹ The Philosophical Works of the Hon. Robert Boyle, Vol. I., p. 172. 1663.

before Boyle wrote his essays, and we know from Agricola that it had been in use in the mines of Saxony upwards of a hundred years earlier. Probably the custom was brought over to England by the German miners, who, as we learn from the State papers of that time, came to Cornwall in Queen Elizabeth's reign. The colloquial German name for the forked rod was *schlag-ruthe*, or striking-rod, and this term translated into the middle English then spoken gives us *duschan-rod*, whence Locke's "deusing-rod" ¹ and thus our modern "dowsing-rod."

A century later (1750) the rod was used in England for finding underground water, being first employed for this purpose in Somersetshire, where underground water is in many places very difficult to locate; and at the present day the rod is most widely used in Somersetshire, where dowzers are most highly esteemed.

The question now arises—What evidence is there on behalf of the dowser that will bear the test of strict scientific scrutiny? The literature on the subject of the dowsing-rod is voluminous, but, unfortunately, of little or no value either from a scientific or historical point of view. It is true that in 1853 the French Academy of Sciences appointed three eminent savants—MM. Chevreul, Boussingault and Babinet—to draw up a report on the subject. M. Chevreul ² was requested by his colleagues to draft the report; he did so, and it was republished in the form of a short treatise sixty years ago. But this report confines itself to the cause of the curious and sudden twisting of the rod which occurs when the dowser is near the object of his search. Chevreul shows that this is not a bit of stage-play by the dowser, for it cannot be imitated by a conscious and voluntary effort, but arises from a sudden involuntary action of the muscles, and is analogous to the motion of the so-called *pendule explorateur*.

This latter is merely a ring or little ball suspended by a thread, twelve or eighteen inches long, the thread being held between the finger and thumb; or the elbow may be rested on the table and the thread passed over the ball of the thumb. With most persons—not, however, with all—the ring presently begins to oscillate in spite of all attempts to keep it still, and its oscillations appear to be endowed with a singular intelligence, for numerous books by learned authors have been written, both on the Continent and in England, about the wonders of the little

¹ See Essay by the philosopher Locke on "Rate of Interest," p. 40. 1691.

² Chevreul, as is well known, was the distinguished French chemist, chiefly famous for his scientific papers on colour, and the artistic and industrial applications of chemistry. He died in 1889 at the age of 103 years, retaining his faculties and scientific activity almost to the last.

pendule. Even the *Philosophical Transactions of the Royal Society of London* for 1734 (vol. viii., p. 404) contains a paper on the mysterious movements of the *pendule*. This paper was the last written by Stephen Grey, the discoverer of electric conduction and of other fundamental electrical phenomena, and the most fantastic and absurd conclusions were drawn by Grey as to the cause and the meaning of these movements. Here I may remark that the history of the *pendule* would form an interesting paper, for its use can be traced back to a remote antiquity ; it was, in fact, occasionally employed by the Roman augurs. One of the later Roman emperors consulted the augur as to the name of his successor. The augur, we are told, after certain ceremonies, held an iron ring depending from a thread ; the alphabet was arranged around him. Presently the ring began to oscillate, first towards one letter, then to another ; thus a name was spelt out, and as it was that of a well-known man the emperor had this unfortunate, and doubtless harmless, individual promptly arrested and executed.

It is the involuntary and unconscious movement of the muscles that causes the ring to oscillate and the dowsing-rod to twist, for neither will move if held by an inanimate and rigid support. Our conscious personality reveals itself through various *voluntary* muscular movements, ideas expressing themselves in speech or gesture. The large unconscious background of our personality reveals itself through *involuntary* muscular movements, to which ordinarily we give no heed. These involuntary movements may be due to reflex actions, as is in the beating of the heart, etc. ; or may be the result of habit, as in walking ; or the result of an emotional disturbance, as in pallor, blushing, etc. ; or they may be due to some unconscious self-suggestion, as the movement of the *pendule* and many of the phenomena of what is called "automatic writing."

Hence the sudden twisting of the dowsing-rod, which is so startling to the holder of the rod, is not caused by any *external* force, as all dowsers believe it to be, but by some cause within the dowser himself. Just as a mental shock may cause palpitation of the heart, so some sudden mental impression or nervous disturbance—even an imperceptible and unconscious disturbance—may cause an involuntary muscular spasm that will twist the rod, and twist it often with such force as to tear off one side of the forked twig. No wonder the amateur dowser, whether he be a learned church dignitary like Dean Ovenden, or a distinguished writer like Mr. A. Lang, or eminent peers like the late Duke of Argyll or the present Lord Farrar, or a geologist like

Mr. Enys, or a chairman of quarter sessions like Sir Richard Harington, Bart., all declare the rod appears to *be alive*, and that they cannot control its sudden and amazing gyration. The rod twists, as that eminent French savant, Professor P. Janet, remarks, "*sans le vouloir et sans le savoir*," on the part of the dowser. (See note at end of paper.)

What, then, is the connection between underground water or metallic ore and this curious idiosyncrasy of certain persons? Is it due to some electrical, thermal, or other physical force exerted on the dowser by the object of his search? This is highly improbable, as I find by actual trial that dowsers are not peculiarly sensitive to these forces, or to any radio-activity that may arise from underground water or metallic ores, although they usually believe that some electrical influence is exerted which causes a sudden muscular spasm and so twists the forked rod, and adduce as proof the fact that the rod will not move if they are insulated from the ground. But electricity has nothing to do with it, for if the dowser *thinks* he is insulated, whilst really he is not so, the rod is still motionless, and it will freely move when he thinks he is uninsulated, though really not so. Moreover, dowsers have been employed with more or less success for tracing other things, such as buried waterpipes, and at one time they were used for finding buried treasure!

What, then, is the source of the nervous stimulus that excites the involuntary muscular action of the dowser? The answer to this question is a complex one. In some cases it is no doubt derived from a more or less unconscious discernment of surface signs of underground water, in other cases it is derived from some dormant idea or subconscious suggestion in the dowser's mind, the exciting cause having nothing to do with the object of the dowser's search. Hence entirely fallacious conclusions may be, and often are, drawn from the sudden twisting of the forked twig. To infer that the motion of the rod is *necessarily* due to underground water or metallic ore is therefore contrary to fact. Nevertheless, in the hands of an experienced and good dowser the indications given by the rod, though not infallible, are in many cases so extraordinarily correct and beyond the skill of any geological expert, that the cause cannot be attributed to chance coincidence, or to some subconscious suggestion, or to the detection of surface indications of underground water.

In such cases the explanation will, I believe, be found to be that the dowser possesses a *supernormal perceptive faculty*, analogous, it may

be, to the curious and inexplicable faculties (such as "homing") which we find in many birds and animals, and our ignorance of which we cloak by calling them "instinct." This obscure perceptive power, or instinctive detection of the hidden object of his search, may not excite any consciousness of the fact on the part of the dowser, but it may be adequate to produce a nervous stimulus which will start the involuntary muscular action that twists the forked rod, held by the dowser in somewhat unstable equilibrium.

As every student of physics knows, there are many physical phenomena which render such an hypothesis by no means improbable. A nugget of gold concealed in its rock matrix, a piece of metal enveloped within the trunk of a tree, a coin swallowed by a child, cannot be detected by any of our senses, but in each case the object is at once perceived if, instead of trusting to our visual perception of luminous rays, we trust to the impression made on a photographic plate or fluorescent screen by the shorter X-waves. Many objects quite opaque to our vision are quite transparent to ether waves, considerably longer or considerably shorter than the luminous waves. Hence, with a suitable detector of those longer or shorter waves, objects which may be completely hidden from our vision can be easily perceived if the object be more or less opaque to these waves. In the working hypothesis I have sketched the dowser is the analogue of the detector of these longer or shorter ether waves, and the subconscious nervous and muscular disturbance produced on the dowser by the hidden object of his search is the analogue of the molecular disturbance produced in the electric-coherer or fluorescent screen or photographic plate.

Certainly a large and new field of psycho-physical research is opened up if it can be proved that certain human beings *do* possess an obscure and transcendental perceptive faculty of this kind.

Here I will cite two or three cases which have been critically examined by competent scientific men that appear inexplicable except by some such hypothesis as the foregoing.

The first case I will cite is a very remarkable one, and might be regarded almost as an *experimentum crucis*. It reached me through the kindness of Mr. G. H. Kinahan, at that time senior geologist in the Geological Survey of Ireland and a well-known and able field geologist. In 1887 the proprietors of a large bacon factory at Waterford, Messrs. Richardson and Co., needed a larger water supply than they possessed; accordingly they had a well 62 feet deep sunk at the most promising spot, but no water was found. They then obtained professional advice

and, based on geological considerations, determined to have a boring made at another spot. This was carried out by a Glasgow firm, and a bore-hole 292 feet deep was sunk, and, as only a trifling quantity of water was obtained, the bore-hole was widened ; but it was no use, the yield of water was so insignificant that the bore-hole was abandoned. The next year, acting upon other skilled advice, they had a bore-hole, seven inches diameter, sunk at the bottom of the 62-feet well. The work was undertaken by the Diamond-drill Rock-boring Company. With difficulty 612 feet were bored through a very hard silurian rock, but no water was obtained. The boring was, however, continued 338 feet deeper, or a total of 950 feet, which—added to the depth of the well—made 1,012 feet from the surface. The result was a complete failure, and this bore-hole, which cost nearly £1,000, was abandoned. Then, acting upon Mr. Kinahan's advice, another spot was selected, and a bore-hole 52 feet deep was made. The strata encountered were, however, identically the same, and Mr. Kinahan advised the firm to go no further, as the quest was hopeless.

These four failures cost the firm considerably over £1,300, and they were considering the advisability of moving their factory elsewhere when one of the partners urged them to try John Mullins, an English dowser, who had been wonderfully successful. Mullins was sent for ; he lived on the border of Somersetshire. He came over and was told nothing of what had been done. He walked over the premises, about 700 by 300 feet in area, asked no questions, but traversed the ground silently holding his dowsing-rod. Suddenly, at one spot, only a few yards from the deep-bore hole, the forked twig twisted so violently that it broke in his hands. Here Mullins declared there was an abundant supply of water, which he estimated would be found at 80 or 90 feet below the surface. At two or three other places the rod also twisted as he walked in and out of the curing-sheds ; these spots were subsequently found to lie in one straight line, passing only a few yards to one side of the other bore-holes. Mullins returned to England that night, and a letter was written to Mr. Kinahan stating the foregoing facts. Boring was begun at the spot indicated by Mullins, where the rod broke. It was considered a waste of money, and a local geologist was asked to report progress to Mr. Kinahan. His letters, written at the time, I have seen, and the result reads like a fairy tale. At a depth of less than 90 feet water suddenly rushed up the bore-hole, pumping was begun, and so great was the yield that the bore-hole was enlarged to a well, and from that time (1889) to the present an

unfailing supply of excellent water, of from 3,000 to 5,000 gallons an hour, has been obtained from the dowser's well.

Mr. Kilroe, of H.M. Geological Survey, has kindly investigated the whole matter for me, and his report shows that Mullins must have struck a line of fault or narrow fissure in the hard ordovician rock, for the water-bearing points he fixed on all lie in a straight line. Through this fissure the water, no doubt, streamed from the adjacent high ground, but there were no surface indications of this fissure, as the rock was covered by 40 feet of boulder clay. If it be urged that it was merely a chance coincidence or lucky hit on the dowser's part, the doctrine of probabilities, after the previous unsuccessful trials, would place the chances against success by the dowser as almost infinite. But this case does not stand alone.

The late Sir Henry Harben gave me the particulars of another remarkable success by the same dowser, the late John Mullins. Sir Henry had built a mansion, water towers, lakes for fountains, etc., on his fine estate near Horsham, in Sussex. He then had a big well 90 feet deep sunk, hoping to get water, but the well was dry. Acting upon expert advice, he next had a well, 55 feet deep, sunk in another place, with no result. As he was one of the directors of the New River Company he was able to call in the highest scientific advice. This he did, and he was now advised to sink a third well at another spot; this was done, and a huge well, 100 feet deep, was sunk in the Horsham clay; alas, little or no water was found. The experts then advised him to run adits in different directions at the bottom of this big well. This he did at the cost of £1,000, but the result was a complete failure. Finally, in despair, he reluctantly sent for old Mullins. Sir Henry met the dowser at the station, drove him to his place, and gave him no information. Mullins perambulated the estate holding his forked twig, and, after searching for some time in vain, at last the dowsing-rod turned violently, and he asserted an abundant supply of water would be obtained at that spot at a depth of under 20 feet; another spot was found close by, and both were on a small elevation. Two wells were dug at these spots, through a hard sandstone rock, and an immense perennial supply of excellent water was found at about 15 feet deep. It is true shallow wells are generally objectionable, but this happens to be an excellent potable water.

This sandstone cap over the Horsham clay was unsuspected, as it was covered with surface soil and grass. The explanation of the

dowser's success might possibly have been attributed to a sharp eye for the ground, had it not been for the fact that the dowser was no geologist, was a stranger to the locality, and the spot had been passed over by the experts previously engaged.

The last case I will cite occurred in County Wicklow, about five miles from Bray. I was anxious to put the dowser to a severe test by asking him to locate places where water would be found and where it would *not* be found. A site was selected in a field on the slope of Carrigoona Mountain, opposite the Great Sugar Loaf Mountain, where the most shrewd observer could not possibly predict beforehand the presence or absence of underground water at any particular spot. The rock is sandstone and quartzite, and water-springs only occur in a few places. I sent for a good English dowser, Mr. W. Stone, who came over specially from Lincolnshire, where he lived. The field was covered with grass, and the bed rock was believed to be only a few feet below the surface. The dowser marched to and fro, and fixed on two spots where he said plenty of water would be found within 20 feet from the surface, and another adjacent spot where he said no water would be found.

Then I took him to another field on the other side of the mountain ; here he declared no water would be found anywhere, the forked twig refusing to move in his hands. A second dowser, a successful amateur, was tried a few weeks later ; he knew nothing of the previous dowser's visit. His indications exactly coincided with those of the first dowser. Boring apparatus was obtained and a set of bore-holes were made, first in one field, then in the other. The bed rock was deeper than we thought, and after boring through 16 feet of hard, dry boulder clay, at the spot where the dowser said water *would* be found, a splendid spring of water was encountered. At the spot, a few yards distant, where the dowser said there was no water, we bored down to the solid rock, and spent a week boring into the rock, but no water was found. At the third place, where he predicted water, we found on boring a splendid supply at 18 feet below the surface. In the other field on the opposite side of the mountain, where the dowser declared no water would be found, we bored in several places down to the solid rock, spending a whole month over it, but not a drop of water was to be found anywhere.

It was in consequence of the unexpected and plentiful supply of water discovered by the dowser in the first field that I secured the land for the purpose of a country cottage, which I subsequently built and

called "Carrigoona." Even in times of great drought, when most springs have run dry, my well has never failed.

These cases are only illustrations, though striking ones, of upwards of one hundred other cases I have investigated of the dowser's success when other means had failed. It may be said "failures are forgotten and successes only remembered." This may be the case with amateur dowsers, but with paid dowsers the tendency is the other way, as public opinion (outside Somersetshire) is against rather than in favour of the dowser. No doubt there are rogues who pretend to be dowsers, and who hopelessly fail when underground water is difficult to locate; and no doubt also, for a large water supply to a town, it would be far better to seek skilled geological advice than trust even to the best dowser. Unfortunately there are no dowsers now living so wonderfully successful as the late John Mullins or the charity boy Bleton in France a century ago.

The upshot of the whole matter is (1) that those who really possess this curious faculty are rare, though pretenders are abundant, the good dowser is a case of *nascitur non fit*; (2) the involuntary motion of the forked twig, which occurs with certain persons, is a muscular spasm that may be excited in different ways; (3) the explanation of the success of good dowsers, after prolonged and crucial tests, is—like that of any other obscure human faculty or instinct—a matter for further physiological and psychological research, though provisionally we may entertain the working hypothesis I have previously suggested.

That there does exist in certain persons this faculty of a transcendental perceptive power—clairvoyance, as it is commonly called, *teleesthesia*, as it was termed by Mr. F. W. H. Myers, or *telegnosis*, as Dr. Heysinger of Philadelphia suggests it should be called—appears to me unquestionable. It is entirely subconscious on the part of the dowser, and in deep hypnosis a lucid or clairvoyant state sometimes supervenes which is closely allied to the dowser's faculty of seeing things afar, or seeing without eyes. One of the most remarkable cases of clairvoyance is recorded in a little book I possess giving the well-attested evidence of the transcendental faculty of a Presbyterian minister, the Rev. C. B. Sanders, of Alabama, U.S.A. Some of this evidence and many other striking cases of clairvoyance will be found in the second volume of Myers' great work on Human Personality, and also in various critical papers published in the Proceedings of the S.P.R. The cases related of Swedenborg and investigated by the

philosopher Kant are well known. Notwithstanding the many papers and pamphlets that have reached me attributing dowsing to some physical cause, my conclusion, that it is a psychical, not physical property, remains unshaken. I have, moreover, been able to obtain experimental corroboration of this view. I sent to Mr. J. F. Young, an amateur dowser, three carefully-sealed envelopes, each containing a card on which I had written a word of three letters. I asked him to try if by automatic writing he could discover what the words were. With one envelope he could get nothing, but with the other two he was fairly successful. That is to say, in each case he got two letters completely right and made an attempt which closely resembled the third.

As regards the cause of the motion of the rod—often beyond the control of, and even opposed to, the dowser's muscular effort—I have an open mind. That it is in most cases due to the dowser's unconscious muscular action I believe, but in certain cases this explanation seems almost incredible. There may be some intelligent force, external to the dowser, which violently moves and often breaks the rod, and if so it would appear to be analogous to the intelligent force which operates in producing the physical phenomena of spiritualism, and which, in the case of a clerical friend of mine, flung the table at which they were sitting for table-turning across the room and then smashed it to pieces, no person present having any part in the amazing phenomena that took place.

FURTHER EVIDENCE OF SUPERNORMAL AND POSSIBLY DISCARNATE AGENCY

BY J. ARTHUR HILL

IN two of my books I have described and discussed the clairvoyant phenomena of Mr. Aaron Wilkinson. These phenomena have been studied by myself and friends over a period of many years, and they have led or driven us, sceptical and hostile though we were at first, to a belief in the agency of human beings no longer in the flesh. We began, as all sceptics rightly do, by supposing that the medium somehow possessed—accidentally or as a result of inquiry—an unexpected amount of information concerning our affairs; but this supposition soon began to appear inadequate, and it was finally abandoned as an explanation when the medium correctly described and named many deceased relatives of friends of ours introduced anonymously—people from distant towns, and not spiritualists or connected with psychical research. Moreover, many intimate and characteristic touches occurred in messages—references to things which it is hardly possible to believe that the medium could have learnt about, even by diligent inquiry; as when the Stonor spirits apparently came to express gratitude for help given them, and incidentally to provide evidence of the kind required.¹

An accumulation of this kind of thing having driven us beyond “normal” hypotheses, we fell back on telepathy. We supposed that the knowledge shown was perhaps reflected from our own minds. But we had to admit that the supposition was a doubtful one, for already in some cases the identifying details about spirits said to be present went beyond the conscious knowledge of the sitters and had to be verified later. We then made wild clutches at “telepathy from our subliminals,” assuming that those subliminals possessed the necessary knowledge which our normal consciousness did not. But in making this despairing effort to save ourselves from spiritistic interpretations it

¹ *New Evidences in Psychical Research* (Rider, London), pp. 58-9.

was painfully obvious that in thus adding assumption to assumption we were clutching at straws supported only by other straws, and we felt little confidence in our hypotheses. We could never discover any parallelism between our own thoughts and what was being said by the medium. Often we found that the beginnings of a description would make us think of a certain man we had known, and on the telepathic hypothesis one would expect the medium's utterances to follow up the thread ; but instead of that the description would continue on its own lines and a name would be given, the whole thing turning out to be correctly applicable to some deceased person of whom we had *not* been thinking.¹

And, in a few cases, things happened which excluded both the normally-acquired-knowledge and the telepathy-from-the-sitter theory. Spirit-people quite unknown to me were described and named, and I found on inquiry that they were relatives of the last visitor I had had, several days before the sitting. I am sure that the medium did not know who my last visitor had been, and in each case it was a person whom I am satisfied he does not know or know of—not a spiritualist or psychical researcher, and not a local resident.

So, as a result of careful study of an accumulation of data, we were forced to the conclusion that a spiritistic explanation was the only reasonable and logical one. There was no satisfactory alternative if we faced the facts honestly. Having been good Hæckelians or Huxleyans, this outcome of our investigations was contemplated with a certain humorous dismay. We consoled ourselves as best we could with the reflection that we had religiously followed the *method* of our masters—observation, experiment, and inference—and that they would probably have come to our conclusions if they had had our experience.

In the two volumes just referred to, the reports of sittings are given *in extenso* and in one of them verbatim. This causes a little difficulty in following the threads, for the medium often describes a number of spirits, harking back to No. 1 after dealing with No. 2 or No. 3, as if things come better when attention is removed, somewhat as we remember a name best by not trying. In order to avoid this disjointedness, I propose in this article, which is concerned with reports not hitherto published, to quote the evidence relative to this or that spirit, taking the evidence, it may be, from different parts of the same

¹ *Psychical Investigations* (Cassell & Co., Ltd.), pp: 43-7, 66, 90, 97-8:

sitting, or from many sittings—for it often happens that a spirit turns up time after time, apparently aware of not having succeeded in getting the desired matter through, and continuing until success is achieved. But though I thus select, I shall quote always the exact words of the medium from the contemporary verbatim notes, and shall include anything said by the sitter if it gave information away or has any bearing on the evidential problem. Readers of *Psychical Investigations* will perhaps be able to credit me with exact reporting and the required wariness as to any information-giving remarks.

The medium is a "normal clairvoyant." That is, he possesses a sixth sense, or whatever we like to call it, by which he can occasionally see "spirit forms," usually lifelike and normally dressed. He cannot do this entirely at will, and consequently declines to give regular sittings to any applicant, no matter what inducement is offered, though he sometimes breaks his rule if impressed to do so, usually for people who are bereaved and in great grief. He kindly comes to us occasionally, on the understanding that we take our chance. Sometimes he goes into trance, particularly (and often unexpectedly to himself) when his normal clairvoyance and clairsaudience have failed to get all that some spirit desires to get through, the control-spirit coming to explain and straighten things out. But generally his normal powers furnish evidence as good as the trance does, with the advantage of greater conciseness, for the trance-control usually converses in a non-evidential way, between the bits of evidential matter. This control-spirit who "takes possession" of the medium in trance purports generally to be a Scotchwoman, but she gives us no name or evidence of identity, and it remains an open question as to whether she is really a spirit or a secondary personality of the medium. The Scotch is broad and life-like, and I am sure that Mr. Wilkinson in his normal state could not produce it, but of course a secondary personality often has powers which the primary consciousness has not, so the excellence of the Scotch speech proves nothing. The control is exceptionally complete, and the medium will often walk about while entranced, with eyes open, the control talking all the time and commenting on the books, pictures, furniture, etc. Curiously, she always takes his glasses off, saying that she can see better without them. Normally the medium is almost blind without their aid; and in his normal clairvoyance he probably does not see the forms with his physical eyes but by some inner sight, somewhat as he gets names by an inner hearing.

Now to details.

At a sitting on March 8th, 1917, the medium said, among other things: "Have you known somebody called Timothy? An oldish man, bent with age. I can see a lot of little pictures. This man is holding some little pictures in his hand—small, tiny photographs."

The name Timothy did not at once recall anyone to my mind, but the photographs did. Our village photographer, who died about ten years ago, leaving no successor in the business, was named Timothy Robinson. He was about seventy-five years old, and for many years walked with a marked stoop. It was a rather curious fact that during the few weeks before this sitting I had been doing a good deal of amateur photography—indoors, consequently it was not known to all and sundry—and it would seem that the old photographer still has an interest in his former mundane occupation and had been attracted to me in consequence. It was his first appearance at my sittings, and my photographic experiments were the first for over twenty years. Robinson and I knew each other well, though I saw him infrequently. He took photographs of me and most of our family at various times. And, as regards the smallness of the photographs clairvoyantly seen, it is perhaps worth noting that Robinson had mostly a working-class clientele, and his photographs were for the most part "carte-de-visite" size, his activities being before the days of photograph post-cards.

It may be urged, by those who are disinclined to adopt the spiritistic hypothesis, that such incidents as these may be due to a reading of my mind. This is a reasonable suggestion, as a guess, and if mind-reading turns out to be a fact; for the information given was certainly possessed by me, though it was not to the fore, for I had not been thinking of Robinson, and I should say that he had not been in my conscious thoughts for many months, perhaps years. And, as already said, I never detect any parallelism between the medium's clairvoyance and my own thoughts, so I have gradually come to doubt the mind-reading which some armchair critics so easily assume. Moreover, their assumption, to be of much use, must cover mind-reading of the subliminal mental levels—things I am not thinking of and some of which indeed I have forgotten, as in other incidents—and this is obviously a step further into guess-work. Still, to be on the safe side it is allowable to postulate mind-reading as a possible explanation of things known to the sitter. I did so myself, at first. But apparently those on the other side perceived my difficulty and proceeded to give me evidence which eliminated this telepathy-from-the-sitter idea. Some of this occurred before the publication of my *Psychical Investigations*, and is therein

described. Other incidents of the same kind have occurred since. The following is one of them.

On March 8th, 1917, the medium said: "There is a gentleman with you, old, tall, straight, not big-bodied, whiskers white, tapering at the chin, straight nose, colour in his face, good clear skin, hair fairly good, not bald, quite thick, stands behind you; a quiet, unassuming man, staid, very thoughtful, well-dressed, kind of little narrow tie, low collar, white front. Rather devout man, rather religious."

This was addressed, not to me, but to a lady friend of ours from another town, whom I had introduced anonymously in the hope of getting something evidential regarding her son, who had been killed. She did not recognise the old gentleman, nor did I. (Her deceased relatives were not known to us.) It did not occur to me at the moment that the spirit might be an acquaintance of mine, though at the same sitting spirit forms which were certainly for us were described as standing by our friend—people she had not known. The reason for this is not understood, unless it is that spirits find it easier to show themselves near some people than near others, the former perhaps having some mediumistic power. Mr. Wilkinson said—it may here be noted—that our friend possessed psychic power of "physical" kind, and so may have helped the spirits to take on quasi-physical conditions. Or it may be that the direction of the medium's attention to this sitter in particular (for when I introduce a stranger he knows that I hope something evidential will occur for the new sitter's benefit) resulted in a mis-locating of the forms, somewhat in the same way as we often mis-hear or mis-see in consequence of expectant attention, thinking we see or hear a friend whom we are expecting, when really it is someone else. Whatever the reason, this mis-locating often happens; and, as in the case just quoted, it results often in non-recognition unless or until a name or something very distinctive is obtained.

However, as happens fairly often, some intelligence evidently perceived that things were not going well and that tactics must be changed, for the medium went off rather unexpectedly into trance. His control—in this case a Yorkshireman who gives his name as John Brotherton and has given identifying detail about himself—proceeded to inform us that a spirit named Caleb was present and that he had been a Methodist. The words, "A charge to keep I have," were also said, apparently in connection with this spirit. They were unfamiliar to me, but suggested a line of a hymn. The name Caleb immediately reminded me that the description of the old gentleman would apply very

well to a much-respected retired schoolmaster, Mr. Caleb Tapp, who had lived in a house belonging to me and had died there about three months before the sitting. He was a Wesleyan Methodist, and sometimes took duty as local preacher. I had never mentioned him to Mr. Wilkinson and I have no reason to believe that the latter had ever heard of him.

I made inquiries of Mr. Tapp's intimate friends, and was informed that a hymn beginning "A charge to keep I have" was one of his favourite hymns, and a member of his chapel "class" said it was his first favourite, judging by the frequency with which he selected it as class leader. This fact would be known to very few. I certainly do not believe that anything about his favourite hymns was ever known to me. I am not a Wesleyan, had not been to that chapel for twenty years, and—being invalided—I had had no conversation with Mr. Tapp for many years. I was not in close touch with any of his friends, and had never talked with them about hymns.

In accordance with custom, I said nothing about Mr. Tapp at the sitting of March 8th, except that I thought I knew who "Caleb" might be. I mentioned no surname or anything about him.

On May 18th, 1917, the medium had an impression of the presence of a Caleb, and asked, in response to my remark that I thought I understood: "Was he a preacher?" I said, "Yes, a local preacher." The medium then got the further impression that the gentleman was not related to me, which was true. To clinch the matter, the surname was required, and this came in curious fashion at a sitting on June 21st, 1917. The medium had gone into trance, and his Scotchwoman control was speaking. After giving evidential matter concerning other spirits said to be present, she remarked: "There is some old man here keeps tapping on the table. He says, 'Tap, tap, tap,' with his index finger on the table. Old style in his way of thinking. A good man, old style. A God-fearing man, you understand?" (J. A. H. "Yes.") "But he has now found out more than he ever believed. He has not been long gone. His eyes are opened wider than ever before. He was fond of children and much among them. He was a man that knew lots of people. Again he taps on the table, tap, tap, tap—he makes me say that.

"That old gentleman is very persistent. He has a pointer such as a man used to make people sing. He is conducting."

It is a fact that he was a keen musician, and taught singing in his school.

After the trance, the medium could see an old man tapping on the

table, his normal clairvoyance thus confirming the statements of the control. I said : " It is a man whose name was Tapp."

A. W.—" Oh, did you know him ? "

J. A. H.—" Yes, very well."

A. W.—" I never heard of anyone of that name before."

No doubt that was why the name could not be got through as a name but was ingeniously symbolised instead. The most interesting feature of the incident was, however, the line of Mr. Tapp's favourite hymn. This seems to exclude the hypothesis of normal knowledge on the part of the medium, and that of telepathy from anyone present, for no one present knew anything about the communicator's preferences as to hymns or anything else. It would seem that this line was given purposely as a piece of specially good evidence of identity, which indeed it was.

At this same sitting of June 21st, 1917, the control said : " Now there is a stoutish man, fresh colour in his face, an apron on, cloth all about him. A fine-looking man, sixty-three or sixty-four. Someone who kens you (J. A. H.) awfully well. He turns the cloth over and over. Great quantities of it. A salesman, perhaps. He tries to speak and there is rather an effort in his throat. He would suffer rather severely at the time."

This applies to my father, who has often been described as present, and his full name given. The turning over of cloth is almost the best possible identity-touch, for it represents his occupation in early middle life (he retired at forty-five) and he often did it later on at his son's mill, for exercise. Both mills were several miles from his house, and he died in 1898 ; few people locally could give any information about his early occupation, or, indeed, about his later amateur continuation of it. And as to possible telepathy from my mind, it is to be noted that I should never have " telepathed " that he was a salesman, which he was not. It seemed more like a picture made by the spirit for the medium to see as evidence—from which he made a wrong inference as to the salesmanship. And the " turning over " of cloth is peculiarly apt ; more so than anyone can understand except those who know the work of a " taker-in " at a cloth-manufacturing mill. While speaking, the medium made with his hands the peculiar and characteristic movements of " throwing over " cloth, exactly as my father did it.

But I do not lay stress on this incident, or at any rate I do not press it on the sceptic as exceptional evidence, for he will assume—though I am sure that the assumption would be mistaken—that the medium

somehow knew all about my father. I quote it as introduction to what follows.

After digressions concerning other spirits, the control again referred to the man who was obviously my father, and said : " There is some lady here, well up in years ; that man with the apron has brought her." (The " apron " is a linen overall, worn to protect the clothes from dust and fluff when handling cloth.) " This lady is a very nice person, quite old, silk dress, rather big woman, not a kinswoman of yours—I can tell by the feeling. She lived away from here, in some big place. A clever woman. Someone who went about a great deal, teaching people. Fond of learning things, and she may impart things to you later on. You will learn about this lady again in other ways. This man has made it possible for her to come. She went out of the body since him. She had association with a kirk, and she had something to do with politics, interested in politics, and retained the interest as long as she lived."

This recalled no one in particular, so I said : " You can't get her name, perhaps ? " After a pause the control said : " I get the name Gregory. Very much interested in politics. She went about a great deal, and knew a great deal, and it has stood her in good stead. . . . The man with the cloth brought the woman who travelled about the world."

This made it perfectly clear. The description applies exactly to Miss Mary Gregory, who died about six months before the sitting. She lived in a distant part of the town (Bradford), four miles away, and I have no reason to believe that the medium—who lives near Halifax—had heard of her ; but even if he had heard of her, it is improbable to the point of incredibility that he had ever known that she had any connection with Thornton—the outlying village and ward of Bradford where I live—or with our family. But the fact is that she lived in Thornton in her early days, her father being minister at the chapel attended by my parents. She would leave the village about 1873. In those days her family and my parents knew each other well, and although no close acquaintance was kept up later on, I regard it as an extremely likely thing—granted survival and the gravitating together of like-minded people over there—that my father will have met Miss Gregory and her brother, who also has been named and described at one of my sittings.

It is perhaps worth noting that a son of this brother was killed in the war on May 13th, 1917. The appearance of this young man's father

on March 8th, and of his aunt on June 21st, may have been connected with this event ; for I have had evidence which convinces me that friends on the other side come to meet those about to pass over, and often remain with them until they have had a rest and are ready to go forward in the new life.

In the August following this sitting, Mr. Wilkinson was at Bournemouth, and I happened to write asking him when he would be back and able to come and see me. While replying to me, he had an impression—as happened once before¹—of the presence of some spirit who was interested in me, and he wrote that he got “the feeling of a person, a lady, about sixty I should take her to be.” (She was more, but did not look her age.) “She must have been well-informed, and gives me the impression of a person well-educated in her time in all educational subjects. She might have travelled, because she had some Egyptian charms in her hand. Of course I don’t know if ever you have known of such a person or not, but really she is a forceful personality, and quite refined. I am sure her name is Gregory or Gregson ; am not certain which, but it sounds like that. And she might have been connected with a clergyman, for I feel such associations about her. I know this is vague, but have just given way to the impression, and tell it you for what it may be worth.”

The fact was that Miss Gregory kept a private school in early and middle life. She spent a winter in Egypt not long before she died ; it was her last journey of any consequence. (I was uncertain about this until I inquired.) Her father and brother were Congregational ministers. The characterisation is excellent. I had told Wilkinson nothing about her at the June 21st sitting or afterwards, and this letter was quite a surprise ; though it is in keeping with what I should expect of her. If she is still in existence, is aware of what is going on down here (perhaps aware of my work through being told by my father), it is in keeping with her nature that she should give evidence of her survival and identity, or even—as was said at the June 21st sitting—assist me in my work in some inspirational way. The idea is pleasant, for she was a fine soul ; but it did not originate with me, and therefore was not telepathic, for I had not thought of her for a long time.

Many things have occurred at my sittings which indicate that those on the other side are to a great extent aware of what is going on here, and are interested in what would have interested them if they had been still with us. On one occasion a relative by marriage who had died

¹ *Psychical Investigations*, pp. 15, 61.

twenty years before was described and named, and the medium had an impression that someone in whom the spirit (a woman) was interested was going to have a baby. This impression grew, and finally the spirit was clairaudiently heard to say "Mrs. Leigh." Mrs. Leigh was the daughter of the spirit purporting to be present, but I knew of no prospective baby. Later on, however, I found that the medium's statements were correct. Mrs. Leigh lived at a distance from both myself and the medium, I had never mentioned her to him, she is not interested in spiritualism, and I have no reason to believe that the medium had ever heard of her.

Regarding this same Mrs. Leigh, it may be mentioned that at an earlier sitting her mother appeared, dressed "in white as if for a wedding." The fact was that the daughter's wedding-day had been decided on a few days before ; but the news had not become public property. This suggested that the mother was not only aware of the impending event, indicating her knowledge by the gala dress and by the impression conveyed to the medium, but also that she purposely appeared in order to give evidence which could hardly be known to the medium. The deceased lady, I may say for completeness, was not known to Wilkinson and was not interested in psychic things. She, also, lived at some miles distance from him, and, indeed, never knew of his existence ; nor, to the best of my belief, did he know of hers. She died long before I became acquainted with Mr. Wilkinson.

On another occasion, January 8th, 1917, the medium said to my sister, M. H. : "Have you been at a funeral lately ? A lady. I see you among a lot of people in black, and I am hearing solemn music. I cannot see anybody (*i.e.*, the person who had died), but I have the impression that the lady died not long ago. It was not a small funeral, there were a lot of people there. I do not feel that it was anybody near to you. Not a relative."

The fact was that M. H. had been to the funeral, on December 30th, 1916, of the wife of a local minister. Many people were there, and "O rest in the Lord" and the "Dead March" were played. The lady was not related to us, but we knew her well. I have no reason to believe that the medium either knew of her death or had ever heard of her or her people ; they had never been mentioned to him by me, and they were not interested in spiritualism.

A little later in the sitting, the medium said : "There is an old lady with you (M. H.), not very long passed away. I have seen her with you before. Quite ladylike. Dressed in black, something white round

her neck, kind of crocheted wrap. Very old, rather refined, not very big. This woman must have been at that funeral. I do not mean in the body. She is tapping me . . . she is taking me back, she must have known something about the person who was buried. The old lady would be eighty, by the look of her."

Though no name was got, this was clearly the old lady who has appeared before, and whom I called Mrs. Walker in my book *Psychical Investigations*, in which is also described how her husband came to meet her at death, appearing at a sitting two days after her departure, she being apparently still in the *post-mortem* sleep or rest and not yet out of earth conditions. Her husband had for many years been a minister of the same church, dying in 1900. His widow died in February, 1916. It is natural—though I had not thought of it—that she should be interested in the wife of her husband's successor (both as minister and as tenant of the same house), and apparently she met her, or at least was present, at the funeral service in the chapel she knew so well. This Walker family left the district in 1900, long before I had even heard of Mr. Wilkinson, and I do not believe that he ever had any normally-acquired knowledge of them.

Later in this sitting of January 8th, 1917, Mr. Walker himself appeared, the medium saying (in trance at this point, a Scotchwoman controlling): "There is a preacher here, an elderly man, with a rather forceful manner. I would not think he belonged to the Kirk; more like a meeting-house. What do you call it?" (J. A. H.: "Chapel.") "Yes, chapel. Dissenters. I belonged to the United Free Church. I don't belong to any Church now. I go to them all. Some lady is here who has not been gone long. She belongs to this preacher man. They have come together. . . . There is some young lady here who knew you (M. H.) very well. She went very suddenly. Very sad. I would not think she would be more than twenty-two. She went to the kirk you went to. She was a beautiful singer and was in the choir. She is trying to bring me into her surroundings. All about singing. That old gentleman who used to preach—she knew him and sang at his kirk. Not lately—some years back; fifteen or sixteen years back."

This is correct of a daughter of Mr. Walker's, except that she was a little older than was stated; nearly thirty, I think. She was in the choir, of which I also was a member, and she was the principal soloist among the sopranos.

After some evidential matter concerning other people, a curious

and instructive incident occurred, which I quote, though it involves the giving of Mr. Walker's real name, which—along with others—I disguised in my earlier book, lest surviving relatives should not like the association. But now that these things are better understood, and particularly in view of the fact that these friends communicate entirely on their own initiative and knowingly—therefore in all probability with full willingness that their names should be used—there seems no sufficient reason for disguise. Wilkinson's control said, then : " There is a clergyman, name begins with a capital T. He could not walk very slow ; he trotted." Here the medium got up and " trotted " with his feet, marking time. Apparently the control thought that this was a peculiarity in the walk of the man in question, and that the spirit was doing it for reproduction as an evidential point. It *was* evidential, but not in that way. The gentleman in question had weak health all his life, and suffered from heart trouble in his later years : during the seventeen years that I knew him I never saw him run or even walk very fast. But the words and the action indicated his *name* ; for it was Trotman. Apparently the machinery of the medium's brain was unequal to the task of getting the unfamiliar name (*cf.* the just-quoted case of Mr. Tapp), as a typewriter cannot write Greek letters if it has no type for that language ; so Mr. Trotman did a little humorous pantomime to indicate the name, somewhat as I, when I become a communicating spirit, may show a picture of a hill, if I cannot get my name through—and perhaps a Round Table as an attempt at " Arthur," which might not be understood if the sitter were dull, as many of us probably are, for I believe that many symbolic points of this kind are missed. Hence the importance of taking full notes, so that they can be studied at leisure. If notes are not taken, things which were not understood at the time are apt to be forgotten, having no apparent relevance.

Immediately after the incident just mentioned, the communicator seemed to continue his evidence of identity—or perhaps to revert involuntarily to old habits associated with earth conditions—by preaching a little sermon. I did not succeed in getting it down in full, for the control spoke rapidly. My notes are as follows :

" Life is composed of seasons. First the season of rejoicing ; you are born, a gift to your parents. Then happiness and promise and development. Then love, marriage, family ties and responsibilities. Then often sickness, and death. But there is one law that worketh through it all, inexorable, always moving on. Nature is transformed,

always improving and perfecting. That is a feeble expression of what the man behind me is saying."

And I further spoilt it by inadequate reporting ; but, as given, it sounded very good. There was no direct control by this communicator ; he spoke to or impressed the regular control—i.e., the intelligence which habitually speaks through Wilkinson in trance and which is accustomed to managing his organism—and the control repeated what he said as well as she could.

After the sermonising, the control said : " Is there anything you would like to ask me before I go ? " Having no sensible question ready, I put the first that occurred to me : " Shall I get rid of bodily disabilities, and be able to get about, when I go over to your side ? "

" You need have no misgivings about that. No more pain. You will go about as you want to. But you must not think that your life has been wasted. There is purpose behind all. If you had remained well, you would not have obtained the knowledge you have obtained. And you are very widely useful. You have no idea of the great range of your influence. Invalids are necessary in the scheme. Do not get depressed, for all is well."

I never do get depressed, so it did not seem that the speaker was reading my mind. I then asked :

" What about cremation ? Is it good or bad ? "

" Good, most decidedly. When the body is done with, it is best destroyed so that it cannot be a source of harm to the living. It is merely garbage—not a nice word, but that is what it is. Better out of the way."

I asked : " Any time after death—no need to wait any particular period of time ? " (This because of the idea that departure is gradual and that too early cremation may cause pain to the spirit which is not yet quite clear of the old tenement.)

" Yes, as soon as you like, so long as it is made quite sure that death has taken place. In cases of sudden death care is required, but all that is necessary is to make sure."

The control then said good-bye, and after a minute or so the medium came to himself, and, looking vaguely out of the window, said : " It's raining." After another minute of silence he was quite himself, but complained of feeling cold, as always after trance ; he also remarked that he " lost himself " suddenly, without expecting the trance. I said : " Where have you been ? " and he answered : " I don't know ; I never know anything."

This digression is of course merely by way of description ; such trance-talk is common enough, and is not evidential or specially interesting, though our critics usually seize on it and neglect the evidence. Since the date of the sittings just alluded to, I have had a series of evidential incidents which seem to have been specially arranged by my friends on the other side with a view to eliminating not only the hypothesis of telepathy from me, but also that of telepathy from anyone known to me. This is a difficult thing, but the attempt was successful. I may be able to describe these incidents in a later article.

FAITH AND SUPERSTITION

BY LILY DOUGALL

PEOPLE often talk glibly of faith and superstition as opposed to each other; and about such talk the cynic says that "faith" applies to whatever the speaker believes, and "superstition" to whatever, other than that, anyone else believes. The terms are so used that the cynic has a right to his gibe. I want, for convenience, to define the time-honoured terms in my own way. In this article "faith" shall be equivalent to belief or trust in what one believes to be good because it is good or is in harmony with the sum of good. "Superstition" shall mean belief in what is marvellous because it is marvellous, or belief in any doctrine because it is founded on, or attested by, marvels. For example, as applied to the miracles of the New Testament, faith, according to this definition, would mean a belief in them—whether mistaken or not—that grew out of an estimation of them as intrinsically good, as in harmony with the highest conception of the universe that the believer could frame, and therefore would include that reverence for truth that would keep the mind open to evidence. Superstition would mean belief in them because they were marvellous, and a belief in the Christian doctrines because they were originally evidenced by marvels.

Let us consider the bearing of this on the attitude of mind with which we approach the consideration of the evidence for phenomena admittedly supernormal.

Clearly even the belief that knowledge of fact is a good thing involves a certain faith in the order of the universe and in reasonableness as the basis of human life. All advance in human civilisation has been made by reliance upon the behaviour of our environment. If one man, being assured that inexplicable phenomena have occurred, at once founds on them a belief that unseen spirits are tampering with material things or with human dream-images or thoughts; and another man, assured of the same phenomena, is convinced that some natural

explanation will yet be found, the first is superstitious and the second has faith. Even though the first man prove right in his inference and the second wrong, the first man's grounds for his premature conclusion would be superstitious and, because irrational, socially disintegrating. The second man's faith in an ordered and explicable universe would be rewarded by discovering, by rational observation, not only the fact of spirit interference, but such detail of its method and conditions as would show that an orderly nature included it. For, if spirits interfere, science could only show that the interference took place by showing that it always occurred under certain conditions, and could, in certain of its aspects, be relied on. Until this was shown, the man who believed in spirit interference merely because of supernormal phenomena would be imagining miracles in every gooseberry-bush and infecting the commonsense of his community.

Yet in dealing with the spiritistic hypothesis as applied to any supernormal phenomena we have a further aspect of the case to consider. Science cannot prove or disprove our religious beliefs. From a scientific point of view these beliefs are assumptions. We count them rational if they do not contradict any explanation that science can give and if they are based upon a sound philosophy which gives some account of what science cannot account for. Science may, by its ultimate analysis, only prove that no adequate cause for an event comes within its purview. Spirit agency as the cause of such supernormal event may transcend its sphere. It would seem, then, that not only will faith or superstition enter into our judgment in these matters in inclining us to believe or disbelieve before scientists have agreed in their pronouncement upon spirit agency, but in determining the further assumptions we may need to make in regard to what transcends the scope of science.

A few illustrations will make this clear. There are few facts better attested by human evidence than that of the frequent appearance of the devil to religious people at their devotions between the fourth and seventeenth centuries.¹ The evidence for the objectivity of the devil is like in kind to, let us say, the evidence for the costumes worn at the same period. Yet we accept the costumes as historic; but, while we may believe the visions were seen, we do not accept the devil as historic, although he is depicted in the same art and described in the same

¹ See records of S. Anthony the Great, 356; S. Datius, 552; S. Theresa, 1582, etc., quoted in Baring-Gould's *Lives of the Saints*.

annals. If we are not materialists our reason for rejecting this mediæval devil has to do with faith ; it is the result of our faith in the dignity and reasonableness of the universe. To the pure agnostic—if such a being exist—a devil with a black face who could materialise himself and gnash his teeth at a saint is as possible as any other intrusion from the spirit world. Most of us have now made fundamental assumptions about the universe which cause it to be impossible for us to believe that the supreme evil could manifest itself in that way. We are certain that there is plenty of evil in the world, and we may or may not believe that there are evil spirits ; but the devil as seen in the Middle Ages—seen and spoken to, and sometimes felt, by men and women whose *bona fides* we have no reason to doubt—was an intellectual conception the origin and development of which we can now trace, and to which we attribute no objective reality because it is out of harmony with our fundamental faith about the universe.

I have frequently visited a New England watering-place near which is a large natural amphitheatre used constantly for open-air meetings. Before one of these meetings, which was to be a religious conference similar to those now so popular at Swanwick in Derbyshire, I was taken to call upon its chairman, and found him and some of his speakers in grave anxiety. They told us that about a year before, in India, in a missionary school for girls, a wave of fresh religious interest had had a strange accompaniment. Some Indian girls, holding a sober prayer meeting, suddenly saw flames of fire upon each other's head and began to speak in an unknown tongue. Their teachers tried at first to suppress the matter, but as the weeks went by the "unknown tongues" were constantly heard at common prayer. The movement spread to other Indian schools, associated always with a religious revival that had no other extravagance laid to its account. The "tongues" passed over into America. In the Western and Central States, in churches and in religious meetings, the same manifestation had occurred, and now . . . We perceived that the story had not been told us merely for its curious interest. A carefully compiled three days' programme of addresses upon the chosen subject was to be carried out. Some thousand people were already taking up camp lodgings around the theatre ; hundreds more were expected as day visitors ; and news had just been brought that a small company of good people who spoke by the Spirit in "unknown tongues" had arrived in the place. We were told that the claim to be "moved by the Spirit" in this way still appealed to the unreasoning awe of

religious people, so that neither reason nor force could be used on the morrow if the "tongues" were heard.

We naturally went to the meeting next morning. The address, on some subject of Christian ethics, was excellent. The discussion that followed showed a good average of understanding and education in the audience. Suddenly, about noon, a weird sound arose; it seemed to echo in fateful fashion all racial memories of oracle and witch. An awed hush fell upon all the people. The very wind that had been gently moving the warm pine-trees seemed to fall; the very voice of the sea on the near shore seemed to cease. A gentle, high-pitched voice, rising and falling in a regular rhythm of meaningless sounds, grew insistent. A second voice arose. Soon there were a number of the "Spirit-possessed" joining in a gentle, monotonous, meaningless, high-pitched chant. One we saw distinctly—a middle-aged woman of saintly appearance and quiet garb, who stood rocking gently to and fro, her eyes closed, apparently entranced and unconscious of her surroundings. The great meeting had to be dismissed.

Why are we convinced that the voices of these good people were not controlled by the Divine Spirit or by any discarnate spirit? The materialist has his answer ready; for him discarnate spirit does not exist. The scientific mind will try to show that known causes—hysterical automatisms, their infectious nature, and the inherited human aptitude for religious superstition—give a sufficient account. But if man is capable of any religious faith which can put him in conscious touch with spiritual reality, this answer of science may explain only the channels through which the Spirit moves; science may some day be able to give an account equally adequate and equally inadequate of all religious experience. In its psychological aspect all religious experience ought to be scientifically accounted for.¹ The pure agnostic is bound to say that he knows no reason why God or angelic beings might not thus use the subconscious minds and vocal chords of saints to break up a rational conference; but, as we have suggested, the consistent agnostic is rare. The reckoning up of philosophic or spiritual values will intrude itself, and judgment on such grounds involves faith in values for which science has no test.

Let us take, again, the innumerable stories in which discarnate saints have comforted their devotees or acted in their behalf; or again, the visions of holy men who in trance saw the horrors of

¹ Cf. *The Spirit*, ed. B. H. Streeter. Essays II. and VI.

purgatory and of hell. The spirit agency in these occurrences is not accepted or rejected by us on a mere question of evidence. Our "sense of reality," our "philosophy of the universe," the deep "values" of our souls on which always rests such faith as we have—all these affect our judgment.

Since this is so, let us consider a little more carefully the exact relation which both science and religion bear to faith and superstition. Science has disentangled itself but slowly from the mad hopes and terrors and fanatical fascinations of magic and miracle. Passion for truth, the patience and labour which are its fruits, no doubt existed in eminent magician, in alchemist and astrologer, though in them combined with that complex energy which, stimulated by the excitement of the marvellous, seeks short cuts to knowledge and power. There has also been true faith combined with the sacerdotal craft that constantly sought, and still seeks, to found religious faith on miracle, and to stimulate it by reverence, not for the good, but for the awful and mysterious. Religion is disentangling itself more slowly from magic; but that faith founded on belief in the good is as distinct from all we may call magic-mongering as is science may be shown by many familiar examples. One that lies near our own day is the use which the godly Victorian cottager made of the Bible—to him a miraculous book, verbally inspired from end to end. Yet look at some old volume which he loved and pored over. Most of it has not been read. The worn portions are those which appeal to his ideal of good.

The real authority of the book for him lay, not in its miraculous character, but in the power of certain portions of it to say, "See, heart of man; this is what you value and know to be divine." We do not always find faith combined with religion, but when it is, it rests on a higher authority than could be bestowed by even the most conclusive evidence of the intrusion of the supernatural into the common way of things. Such intrusion may be heartily believed in and may divide the interest, but it is actually irrelevant.

As we have seen, so far as mere evidence goes, the "unknown tongues" certainly happened; so also did the apparitions of mediæval devils. Visions that depicted the horrible tortures of hell¹ also happened; and certain physical activities attributed to discarnate saints—such as the finding of lost property or the healing of diseases—certainly occur. Whether we believe these things due to spiritual

¹ E.g. *The Revelation to the Monk of Evesham Abbey*, 1196.

agency or not is a question which involves our ethical and religious values.

If, then, science has no test for what may lie behind our supernormal experiences, how are the values of faith to be applied to them—to the age-long marvels of hypnotic trances or automatisms? Has not the human world through all its undeveloped and developed civilisations been instructed, impelled and compelled by the marvels of trance-land? Intoxications from fumes or drinks, giddiness from the sacred dance, reverie caused by rituals that arrest and strain the attention, the ecstasy of intense emotion, the quiescence of profound thought, the trance of the hysteric or the hypnotised, the delirium of the maniac—all these have been regarded as states of special illumination or demoniac possession. Most of them, in the normal human being, are conditions from which the complexity of common consciousness falls away, and in which strange things happen which do not happen otherwise. The medicine man chewing his betel-nut sees suddenly, as in a vision, how to rule his devotees. The oracle inhaling incense experiences strange power shrewdly to guess the fate of nations. The Red Indian, fallen in the wheeling dance, sees the Great White Spirit and his ancestors in the happy hunting-grounds. The prophet who loses consciousness of self in the enthusiasm of his subject cries with conviction, "Thus saith the Lord!" The monk or nun, in the long prayer ritual, sees visions or hears voices or experiences levitation. The hermit of the East, who seeks to do away with the things of sense, can, by his trance practice, transcend the world and have foretaste of Nirvana. Lost in the joy of some external beauty, the poet or artist experiences the interpreting vision of genius which he may work out at will but cannot experience at will. Half asleep and in brown study, the laborious statesman catches an all-sufficient glimpse of the road to empire, and forms a judgment of which he can give no rational account. By the light of these things man, reasoning animal as he is, has often been guided on his pathway down the ages. Has the light of trance-land been an *ignis fatuus*, or the lamp of life?

Certainly, all down the ages psychological happenings that overrode the will of their subject have been attributed to the influence of discarnate spirits, divine or otherwise. The dream, the delirium of fever, the impulse to automatic speech or writing, the impulse or idea that surges up unbidden within the mind, ecstasy, trance, absence of mind—all these have been the conditions, and sometimes the stock-in-trade, of so-called inspiration. It is impossible to read the accounts

which modern research has given us of the "schools of the prophets," and the early Hebrew conceptions of the influence of the Spirit, without perceiving that whenever a human being was, to use an excellent old phrase, "beside himself," he was held to be inspired. He might speak truth or falsehood, and for a while the same God might inspire both; but as the conception of God became higher, lesser or evil spirits inspired what of falsehood or malevolence came from the lips of the involuntary speaker. In the Mystery Religions, in the classic religions of Greece and Rome, we come constantly upon the same thing in tales of oracle and ecstasy too numerous to recount. In the New Testament we have vivid pictures of the violent neurotic affections attributed to demoniacal possession and of the practices of people possessed with the "spirit of divination." We read of the incoherent automatic speech that was believed to have divine origin, and of dreams and ecstasies full of valuable import.

The course of history, the facts of evolution, seem to show that life is educated by being allowed to search out its own way, to discover good and God by trial and experiment. There is in human history no sign of the Divine compulsion or of the exact direction so fondly dreamed of by all generations of lazy minds. The school of life and faith demands the utmost exercise of intelligence. Yet if we believe that man lives in a spiritual environment of Divine Wisdom, we must believe that spiritual help, persuasion and advice are pressing in upon human souls whenever they give the Spirit ingress. And since the revelation of good comes to us also through experience of earthly friendship, it is natural to assume that this revelation should also come in the love of our friends who have passed through the gate of death. Our question, then, is not whether spiritual inspiration exists, but, do we believe in it because it has some hallmark of queerness by which we may know it to be valid? Is it to be vouched for because the hand writes of itself, or the mouth speaks of itself, words that the conscious mind has never formed? Do we accept revelation because it has come through some back door in the cellage of the human mind, or do we sift the things that come that way by our standard of good, and accept as inspired only the things that are good because they are good?

A review of the past shows us that time has sifted out such historic happenings as illuminating or otherwise in accordance with our sense of good. Our psychological explanation, as far as it goes, shows that these unexpected happenings of the mind are the product of past reasoning and past conscious experience of the individual or the race;

it is no more surprising that some of them should be illuminating than that illumination should come to us through our ordinary mental processes.

Since, then, we find that in past history we do wisely to test all by our estimate of good and evil, and while the value of contemporary spiritistic phenomena is in dispute, it behoves us to apply to them the same tests, admitting that contemporary criticism of any movement must be tentative.

In the first place, let us ask what the scientific method could be expected to prove with regard to spirit communication. Can any amount of cumulative evidence show that such information as could be verified was entirely beyond the human knowledge of mediums through whom the information came? If an exhaustive examination of the human mind in automatic conditions afforded no examples of the same kind of knowledge except when the claim of spirit agency was made, we should perhaps have all the evidence on this subject that science can give. We are far from having such evidence, but, even when we have it, shall we have more than an addition to other inexplicable facts of animal intelligence to which we have no clue? What knowledge and experience it would require to enable any of us to tell the best way through the air from England to Africa by which *en route* the best resting-places for birds could be found! Yet in several species of birds nesting in England the parents flock and fly away weeks before the fledglings go. The young birds leave the valleys in which they were hatched and thread the untracked pathway with unerring knowledge. We may assume that discarnate spirits guide them, or we may assure our children that instinct is the guide: both answers would only veil our ignorance. It therefore seems legitimate to doubt whether science in its ultimate research can do more than prove that we do not know how the mediums gain their information.

On the other hand, psychological and anthropological science can show us good reason why, in and after an age which undertook to deny man's immortality, the dream-mind of the race should be filled with voices and images of the newly dead, and should keep reiterating promises of a pleasing heaven. We have material gauge of the length and the strength of the racial belief in immortality—the valuable implements buried in early tombs, the money paid to ecclesiastical coffers for welfare in the further life, are valid evidence. What the race has held so long and with such emotion would, when suppressed, be liable to recur in dreams or other fantasies of the mind. The

spiritualistic interpretation of psychic phenomena is much like the "wish-fulfilment" of the dream self. In face of the uncertain light which science now or in the future may give, let us estimate the value, as far as at present observable, of the spiritualistic belief. It has been claimed by several spiritualists that a new theology has come to us through the séance. This is a mistake made in evident ignorance of popular theological speculation. I once had occasion to read a good deal of religious pamphlet literature produced in America in the thirty years preceding the Civil War. With access to these writings it would be easy to show that the jargon of the earliest American spiritualists was only a pale and chaotic reflection of vigorous religious speculation which had been previously published. Spiritualists like Sir William Crookes, who affirm that new religious light has come through the séance,¹ have evidently not studied the great movement of speculative Christian thought which, since the seventeenth century, has shown itself in all parts of Christendom, due partly to the development of imaginative sympathy with sin and suffering and partly to the natural application of the facts of biological growth and development to religion and ethics. With the exception of the belief in communications from the dead, there is no idea in the interesting account of "spiritualism as a religion" given by Mr. J. Arthur Hill² that has not been tossed to and fro in the discussions of liberal theologians for the last three-quarters of a century. Thus it does not appear that such "inspired" messages as spiritualism produces can be valued as a contribution to religious thought, for so far there is in the so-called "messages" of the mediums nothing original.

Again, it is difficult to see how it is possible for any authentic description of the after-life to come through spirit agency, even were that agency genuine, because it must always pass through the mind of the medium whose dream dramatisations can never be certainly distinguished from the real "message." Such descriptions as have so far been recorded are chiefly vacuous, often inconsistent with each other, and often absurd.

It can be seen, from the history of many Christian saints in different ages, and certainly from the history of many modern reformers, that faith, entrenching itself in its highest values, centres itself more and more upon communion with the supreme Loveliness, which must be

¹ Art. *Spiritualism*, in Chambers' Encyclopædia, 1888 edition.

² *Spiritualism, its History, Phenomena and Doctrine*. Part II. Chapter 1.

personal and must be the guarantee of all truth. The argument for religious faith rests on our human values. Truth, loveliness and virtue are nothing to us in the abstract but logical counters. Of these, as qualities in things, only beauty is visible. But because they all inhere in personality we find in them our supreme values. If the universe be not teleological and the expression of such personality we have no evidence that truth exists. If human values—let us say the values of Shelley as expressed in *Prometheus*—belong to man alone, then the world is for him chaotic. "If virtue is peculiar to the mind of man, the universe is a fraud to us. We can have no fellowship with it, for it is indifferent to all we most value. It does not mean to produce in us righteousness, or the love of it; it does not mean to produce beauty, or the love of it. There is in it no coherent or purposive set of facts which we can call truth; and our love of truth, like our love of righteousness and beauty, is a chance product of a process indifferent to all such things."¹ Then we may go on to say, "The very word *universe* is a concept of our own implying some unity and coherence in the mass of facts of which we are aware. There may be nothing but facts without any unity or coherence. Or it may be that we are not aware of the reality of anything."¹ Either the universe is spiritual, and we through our values are in touch with spirit, or all search for truth is futile. It is this argument, unconscious and implicit in the godly mind, on which all faith that postulates a purpose in the world and the finding of human values in God has taken its stand.

Asking, seeking, knocking at this door, man has at all times believed himself to gain admittance to Creative Spirit and receive for response assurance of, and gradual elevation of, his highest values. The natural powers of the soul are believed to become the instrument of the Divine Spirit when man's desire is in harmony with the creative purpose. By the practice of worship and prayer the religious mind attains to an incommunicable certainty of obtaining personal response. It is quite open to the psychologist to explain this in terms of some law of suggestion. On its psychological side no doubt the process could be traced. The belief that this process is used by God to impart His wisdom to the soul is based on the more fundamental belief that unless the ineradicable values of the soul have reality it is a world without truth. Psychological science can, of course, also give an account of these values—an account as adequate and as inadequate as its account of the soul's apprehension and appropriation of all else.

¹ *The Kingdom of Heaven*, by Mr. A. Clutton Brock, pp. 2-3.

Growing by trial and experiment more and more convinced of the delight of this communion with God, faith finds all human fellowship enhanced thereby. In the Divine friendship is found, not only a perfect guarantee, but a perfect medium for continued, though wordless, fellowship with the friends who have passed the gate of death. There are innumerable expressions in religious literature of this contentment of faith. Its first postulate is that the human soul exists only to satisfy the love of the supreme Spirit, and must therefore grow increasingly through immortal ages more worthy of that love. To such faith the Vale Owen heaven could have no value ; nor could any sign that only gave assurance of the mere continued existence of the dead. Nor would it be easy for men who have this faith to see how these things could help those who have it not to that communion with God which involves all that is of true worth. Perhaps the simplest expression of this faith founded on value is given mystically by Blake :

For Mercy, Pity, Peace and Love
Is God our Father dear ;
And Mercy, Pity, Peace and Love
Is man, His child and care.

Perhaps the clearest is that of Paul, " I know whom I have believed, and am persuaded that he will keep that committed to him."

Yet while there are such numbers of people to whom death appears like a leap in the dark, and whose belief in the continued existence of their departed friends is *nil* or quite vague, it cannot be denied that the scientific assurance of the continued existence and identity of souls beyond the grave would add materially to human happiness. If such assurance, and communication with such souls, be possible, it is undoubtedly a proper subject for scientific investigation, because all increase of knowledge is good, and such knowledge, at any rate at first, might be a satisfaction to many. One may guess that when the novelty wore off the doubts of the pessimist and the faithless would centre round the next phase of existence exactly as they have heretofore circled round every crisis of life and death. Would these not soon cry, " Who knows to what misery this next phase may lead ? Who knows whether existence in it is worth having ? Who knows how long that existence may be prolonged ? "

I incline to believe that the ultimate value of modern spiritualistic speculation is the extension of human knowledge as regards the powers and capacities of the sub-conscious, which appear to develop under trance conditions. Surveying spiritualism from the first " Rochester

rappings " to the present day, it would appear probable that, like astrology and alchemy, it will give birth to a sound science—a science by which we shall understand and control the extended human powers of which in certain abnormal conditions only we now catch fitful glimpses. As the philosopher's stone was never found by any alchemist, nor the future ever read in any horoscope, so it may be questioned whether verbal communication with discarnate souls is among the psychic powers which the new science will discover.

PSYCHOPATHOLOGY AND PSYCHIC RESEARCH

By T. W. MITCHELL, M.D.

UNUSUAL phenomena which were considered supernatural have been observed in all ages, but it is only in modern times that their serious investigation has been undertaken. Some of these unusual happenings appeared to be independent of all human activities, and were commonly ascribed to the agency of good or bad spirits who had command of the forces of nature, and acted directly, without human intermediation, on the objects of the natural world. But very often it was noticed that some human being was more or less directly connected with the supernatural manifestations. From the beginnings of history we have records of peculiarly endowed or afflicted persons who seemed to have the power of acquiring knowledge in a supernormal way, or in whose presence seemingly inexplicable events in the physical world sometime occurred ; and it was observed that exhibition of these powers was often accompanied by some mental or bodily change in the person so gifted which was commonly thought to be due to "possession" by an alien spirit. These two kinds of supernatural manifestations have their counterpart in modern times in the psychological phenomena and the physical phenomena of spiritism ; and the mental or bodily change observed in seer or magician corresponds to what we now know as mediumistic trance.

It is useful and convenient to make this distinction between the two groups of phenomena with which Psychic Research has to deal, for the significance that may be ascribed to observations in one group may be quite different from that which may be suggested by experiences in the other. The interest of the psychopathologist turns naturally towards the former group because of the more purely psychological problems which it presents, and because it is here that his special knowledge is likely to be of value. In Psychic Research the first aim of the investigator is to find, if possible, some natural explanation of what appears to be supernatural. The investigator of the

physical phenomena ought to know something of the psychology of suggestion and illusion, but the special knowledge and capacity needful for the detection of fraud is perhaps his most important qualification. The investigator of the psychological phenomena needs different qualifications. His main problem is the supernormal acquisition of knowledge, and although in this region fraud cannot be ruled out, it is here less frequently resorted to, and more easily guarded against.

The association of trance or allied states with these two departments of Psychic Research would, of itself, suffice to bring them both within the province of the psychopathologist, but in the following pages space will permit of reference to only two topics on which his special knowledge is particularly helpful and necessary. One is the nature of the trance state ; the other is the source of the supernormal knowledge which sometimes appears to be manifested therein.

Both Psychic Research and the psychological investigation of abnormal mental states have arisen from the same source, and although, in the course of time, the two lines of inquiry have widely diverged, it is well to keep in mind their common origin. The attention of the scientific world was first directed towards the "supernatural" by the work of Mesmer, and when "magnetic somnambulism" was discovered by Puysegur, in 1784, a common starting-point was found for two lines of investigation which have culminated, in our own time, in Psychopathology and Psychic Research. The endeavour to understand the nature of the magnetic trance was the point of departure of inquiries which have led to the knowledge we now possess of the psychology of abnormal mental states. The range of the phenomena associated with trance states, and the apparently supernormal powers of entranced persons, were abundantly demonstrated during the wave of spiritualism which swept over Europe and America at the close of the Mesmeric period ; and, in the end, scientific men were compelled to examine the nature of the phenomena, as well as the nature of the trance in or through which they were manifested. The study of these and allied phenomena is the special province of Psychic Research. The nature of trance states is, to this day, one of the most important problems in psychopathology, and is, perhaps above all other problems, the subject-matter of psychopathology in its relation to Psychic Research. For an understanding of trance states carries with it some understanding of almost all conditions in which apparently supernormal manifestations are observed. Not only trance utterances and trance

writing, but "automatic" writing, table-tilting, crystal visions, apparitions, and other phenomena often claimed to be spiritistic, have their mechanism revealed when we understand the nature of trance states.

The magnetic trance of the Mesmerists is now known to have been identical with the deeper stages of hypnosis described by modern observers, and there are good grounds for believing that mediumistic trance, in all its forms and degrees, is psychologically of the same nature. In the one case the trance is induced by the hypnotist; in the other it is spontaneous or self-induced; but the resultant psychological state appears to be similar in every important respect. Spontaneously occurring trance, unaccompanied by mediumistic powers, is common in hysteria, and here again the same psychological mechanism is involved.

The field of psychopathological inquiry at the present day extends far beyond the region of hysteria and hypnosis, but it should not be forgotten that all our most recent knowledge, not only of abnormal mental states, but even of the structure and process of the mind, had its beginnings in, and is the result of continuous outgrowth from, the pioneer work of the animal magnetists and hypnotists.

For the purpose of understanding our present-day conception of the nature of trance it is not necessary to examine the views of these early workers. We need not go farther back than the latter half of the nineteenth century, when the modern revival of hypnotism took place under the influence of Liébeault and Bernheim, at Nancy, and the modern study of hysteria was started by the work of Charcot, in Paris. The memorable controversy between the Paris and the Nancy schools on the relation of hysteria to hypnosis did much to help our understanding of both of these conditions, and the extensive studies of Pierre Janet on the psychological mechanisms involved in their manifestations provided us with a principle which we still make use of in the description and interpretation of trance states and their accompanying phenomena.

Janet showed very clearly that, in the common symptoms of hysteria, consciousness becomes dissociated, or split into two or more parts. In this disorder the sensations from an anæsthetic area of the skin, for example, are not really unfelt, although the patient may truthfully say that he is not aware of them. If such a patient be pricked on the anæsthetic area a certain number of times, and asked how many times he has been pricked, he will be unable to tell; but if

he be then hypnotised, not only will he feel clearly pricks inflicted on this same area, but he will remember how many times he was pricked on the former occasion. This seems to show that both before and during hypnosis there was clear discriminative consciousness at what we may call the hypnotic level.

In this simple experiment we have an illustration of what is meant by a dissociation or splitting of consciousness. The sensations from the anæsthetic area would, in normal health, be included in the "waking consciousness." In hysteria they are dissociated, so that the waking consciousness is unaware of them. But the experiment shows that the loss of awareness is not absolute. The sensations are noted and discriminated by some self. What this self is, we need not now stop to inquire. It may be a self that differs from the waking self only in the possession of those sensations which the waking self has lost. In so far as these sensations are in question there is a self that has them, and a self that has them not. Since the self that has them is revealed or produced by hypnosis we may refer to it as the hypnotic self.

Between such a doubling of the self as is revealed in hysterical anæsthesia, and that met with in fully developed double personality, every shade and degree of complexity may be found. The section of consciousness split off may be so small that its dissociation leads to no appreciable alteration of the waking self, and its incorporation in the hypnotic self is insufficient to cause the hypnotic self to appear appreciably different from the waking self. Such is the case when the dissociation bears, for example, on the sensations from some limited area of the skin. On the other hand, the content of the dissociated part of the mind may include so much of what ought to be in the possession of the waking self that its loss may profoundly alter the character of the "primary personality," and the "secondary personality" which gains possession of, or is constituted by, the dissociated mental material, will show a character which may be strikingly different from that of the restricted personality resulting from the loss of this mental material, and also from that of the normal "whole" personality.

The normal whole personality would seem to be practically non-existent so long as the dissociation lasts; but the restricted personality and the personality which possesses the dissociated mental material seem, sometimes at least, to exist concurrently, and they may alternate one with the other, each taking possession of the bodily organism for a time, and then disappearing to make way for the other. Alternating personalities of this kind are most readily understood if we compare

them with what may be brought about in hypnotic experiments. When deep hypnosis can be induced it is found that restoration to the normal state is accompanied by complete forgetfulness of all that happened during hypnosis. But when hypnosis is again brought about, the hypnotised person can remember all the events of the previous hypnosis as well as the events of waking life. We may therefore speak of a hypnotic self whose knowledge is more extensive than that of the waking self, and since the hypnotic self claims to have concomitant awareness of all that happens to the waking self, we may use Dr. Morton Prince's term and call it a "co-conscious" self. In the induced alternations between waking and hypnosis, and between hypnosis and waking, we have a parallel to the self-induced or spontaneously occurring alternations of co-conscious personalities.

Not all secondary personalities, however, claim co-consciousness. There is another type in which the memories of the alternating phases are mutually exclusive. If A has a secondary personality B, which is co-conscious, we may say that A does not know B, but B does know A—knows all A's thoughts, feelings and actions directly, and knows them as belonging to A. But if A and B are simply alternating personalities without co-consciousness, we say that A does not know B, and B does not know A. "Sally" of the Beauchamp case, and "Sleeping Margaret" of the Doris Fischer case, may be taken as extreme examples of co-conscious personalities, so far at least as their claims to co-consciousness are in question. Sally and Sleeping Margaret maintained that they were always conscious—not only when the other personalities were awake, but also when they were asleep. Sally and Sleeping Margaret declared that they themselves never slept. Ordinarily, however, a co-conscious secondary personality merely claims to be aware of what the primary personality feels, and thinks, and does, during waking life. At the other extreme—the complete absence of co-consciousness—we find such examples as the secondary state of Ansel Bourne, and the BI and BIV personalities of the Beauchamp case. Ansel Bourne fell into a secondary state which lasted for many months, during which time there was no knowledge or conscious recollection of any of the events of his previous life. Then there was a return to the normal state, with complete knowledge of the life previous to the lapse, but complete forgetfulness of the life during the secondary state.

Although the merely alternating type of multiple personality in which no co-consciousness is shown is in some ways the simpler and

more easily understood, we yet know less about it than we do of the co-conscious type. For we have no experimental parallel for the simply alternating type, whilst in deep hypnosis we have a close parallel in many important respects to what is observed in co-conscious personalities. What the essential difference between the two kinds of dissociation may be it is difficult to conceive, and we may find that all secondary personalities are potentially co-conscious, although the conditions necessary for the manifestation of co-consciousness may be absent. A secondary personality that is not co-conscious may merely be a secondary personality that is subliminally asleep.

It is now very widely recognised that in the spontaneous and experimental phenomena of hysteria and hypnosis we find examples of the mechanism through which many supernormal manifestations are brought about. Visual and auditory hallucinations are easily induced by suggestion in good hypnotic subjects, and not only can these hallucinations be induced during hypnosis, but by post-hypnotic suggestion they may be made to appear to the waking self at a particular time or place. So, also, the subliminal motor activities concerned in table-tilting and automatic writing may be experimentally induced. Any good hypnotic subject can be trained to produce automatic writing in the waking state, and self-training without hypnosis may bring about the same result; or the power may appear spontaneously whenever the requisite dissociation is present. The "controls" of mediumistic trance bear the closest resemblance to the secondary personalities described in the writings of the psychopathologists, and there are good grounds for believing that all trance personalities are of this nature. If this view is accepted it is important to assume that the controls of mediumistic trance are always of the nature of co-conscious personalities, and that any knowledge acquired by the medium in ordinary life becomes a possession of the control, although knowledge gained by the control during trance may never rise into the medium's waking consciousness. We must assume a complete parallelism in this respect with what we know of hypnotic trance.

Students of psychopathology would, as a rule, maintain that every control is a secondary personality formed from the medium's own mind, or a dramatic impersonation assumed by such a personality. Some students of Psychic Research believe that mediumistic controls are always what they purport to be, namely, extraneous spirits who have temporarily obtained possession of the medium's body. There

are other, more cautious, investigators who, though willing to concede that the ordinary control in mediumistic trance may be a secondary personality displaying supernormal powers, are nevertheless greatly impressed by some instances of what is known as "direct control." In these cases the spirit of some departed friend of the sitter purports to take possession of the medium's body, and communicates directly, instead of through the intermediary of the medium's usual control. Voice and gestures, intonation and mannerisms of the purporting communicator are then reproduced, it is said, with a startling verisimilitude which is deemed to be beyond the power of any secondary personality to imitate, no matter how great its knowledge of the dead friend may be, or how such knowledge may have been acquired.

The scientific investigator who seeks to find a naturalistic explanation of all trance phenomena may leave on one side, to begin with, this question of direct control, but he is bound to face the problem of the supernormally acquired knowledge which, in the opinion of almost all serious students who have had personal experience, or who have carefully examined the evidence, trance personalities do sometimes undoubtedly display. His simplest course, and one very commonly adopted, is to deny on *a priori* grounds the possibility of any supernormal acquisition of knowledge, and to refuse to examine the evidence which workers in Psychic Research lay before him. But this is merely to shirk the problem. If, however, he undertakes personal research, or if he studies with care the evidence supplied by other investigators, he may be forced to conclude that instances of supernormal acquisition of knowledge do occur, and he must be prepared to adopt some hypothesis which will cover all the facts to be explained. Very often the possession of knowledge which could not have been normally acquired may be accounted for, if we admit the possibility of one mind being able to communicate with another mind otherwise than through the ordinary channels of sense. And if we once admit the actuality of supernormally acquired knowledge, we find that we cannot take a step forward on the road to explanation unless we admit telepathy as a fact of nature. Any alternative hypothesis which can be suggested will appear more extravagant and unlikely.

But the problems are not all solved by the acceptance of telepathy. Within recent years much evidence has been forthcoming, which seems to show that agencies other than incarnate minds in telepathic communion are at work in some of the communications received through automatic writing or trance utterance. The long series of "cross

correspondences " recorded in the Proceedings of the Society for Psychical Research seem to call for some explanation other than telepathy between the living, or else for telepathy of a kind different from anything that we have hitherto conceived.

The alternative hypothesis, the hypothesis of spirit communication, postulates the existence of discarnate spirits, and assumes that they are the source of the supernormal knowledge displayed in mediumistic communications. Such communications may be held to be effected by means of telepathy between the discarnate spirit and the mind of the medium, or by an actual possession of the medium's bodily organism by the discarnate spirit.

Most people who are seriously interested in Psychic Research take up one or other of these three attitudes. They either consider that the fact of supernormally acquired knowledge has not been fully established ; or they admit the fact and believe that telepathy from the living is sufficient explanation in all cases ; or they think telepathy from the living inadequate, and adopt the hypothesis of spirit communication. Belief in telepathy appears to be very lightly adopted by uncritical people. With little or no knowledge of the evidence which points to its being an actual mode of communication between one mind and another, they will readily affirm their conviction that it often occurs. Yet they will reject with scorn the possibility of communication with discarnate spirits. Such people have not grasped the full implications of a belief in telepathy. They have failed to see that the step from the purely naturalistic view of positive science to the acceptance of telepathy is a bigger one than that from the telepathic to the spiritistic interpretation of supernormally acquired knowledge. For, as the late Lord Rayleigh said in his presidential address to the Society for Psychical Research : "Telepathy with the dead would present comparatively little difficulty when it is admitted as regards the living." If a believer in telepathy between the living should object that we know of the existence of the living, but do not know of the continued existence of the dead, it may be pointed out that proof of minds being able to communicate with each other without the intermediation of the body would, in itself, be evidence in favour of the view that human personality may survive bodily death.

The chief task of Psychic Research is to establish beyond cavil the fact of supernormally acquired knowledge, if fact it be, and to discover, if possible, the source from which such knowledge is derived. Hitherto the psychopathologist has been in no way better qualified than other

people to answer this question. His work in Psychic Research has mainly been confined to the investigation of the states of consciousness in or through which manifestations of supernormally acquired knowledge are alleged to occur. All he has been able to do is to show that mediumistic trance is similar in kind to other trance states, and that the *mechanism* of mediumistic communications is indistinguishable from what is observed in pathological or quasi-pathological states where there is no evidence of supernormal powers. By insisting on these resemblances, and showing how they may be found in all the records of trance phenomena, he helps the student to distinguish those problems which are primarily problems in psychopathology from those that lie within the special province of Psychic Research. Much popular misconception would be avoided if the distinction between the mechanism and the supernormal content of trance communications were clearly kept in mind.

Although, in the past, psychopathology's main contribution to Psychic Research has been confined to the elucidation of the nature of trance states, and the mechanism of trance communications, recent developments in this field raise some hope that it may also shed light on the source of the supernormal content of trance utterance and automatic script. The widespread doubt of scientific men as to whether knowledge is ever supernormally acquired must not be forgotten. The psychologist must ever be on the look-out for natural explanations of all the phenomena of Psychic Research. The assumption that any item of knowledge displayed by a medium has been supernormally acquired is based upon the seeming impossibility of accounting for the presence of that particular item of knowledge in the medium's mind. If this assumption be false, if the knowledge in question has been acquired through the ordinary channels of sense, a thorough exploration of the medium's mind should reveal its source.

The earlier records of multiple personality made little pretence of indicating the source from which the mental content of the secondary states was derived. These secondary states had the appearance of being foreign to the character of the individual, and often seemed so alien to all that was known of his past life and conduct that it was easy for the uncritical to believe that some spirit from another world had for the time being taken possession of his bodily organism. But when psychologists came to investigate cases of this kind they were able to show that secondary selves were nothing but mental dissociations of the same nature as the lesser dissociations displayed in

common hysterical symptoms, or in ordinary hypnotic experiments. The cause of the dissociation and the particular content of the dissociated states were often, however, very inadequately accounted for, and it is on these two questions that more recent psychopathological work has thrown some light.

The conception given to us by the older school—the conception of dissociation—has been of the greatest service both in psychopathology and in Psychic Research. What promises to be a still more far-reaching conception—the psychoanalytic conception of mental conflict and repression—is the most notable contribution of the new school to our understanding of both normal and abnormal states of the human mind. By means of this conception not only can we understand why dissociation takes place, but we can understand also why dissociation bears upon one section of the mind rather than on another, and why the mental content of a secondary state is just what it is.

The conflict with which the psychoanalyst most frequently has to deal is a conflict between the conscious self and tendencies which are opposed to the cultural or ethical ideals which the self has adopted as its own. The intrusion of these disclaimed tendencies into consciousness is accompanied by mental pain which may be unbearable, and if such an intrusion has taken place, relief from the pain can be obtained only by splitting off the offending tendency, with its painful feeling tone, and repressing it into the unconscious. But the repression of the intruding tendency may carry with it much more than the tendency itself. It may lead to the repression of everything in the mind with which the painful tendency has established associative connections. We may thus have dissociation of a much larger section of consciousness than that upon which the repressing forces primarily bear. The whole of the associated material may form a complex which includes everything appropriate to a certain mood or interest, and the dissociation of such a complex may lead to the formation of a secondary personality.

The significance of psychoanalysis for Psychic Research is not confined to the light it throws on the mechanism of dissociation. It is as an instrument for the investigation of the content of the mind that this new method in psychology is most important. And if the naturalistic interpretation of psychic phenomena be true, if all the knowledge displayed by the controls in mediumistic trance has somehow gained admission into the medium's mind through the ordinary channels of sense, if, indeed, there be no transcendental world, or if human beings have not the power of getting into communication with

it if such a world there be ; then a thorough psychoanalysis of the medium's mind should, in suitable cases, reveal the sources of knowledge which appears to have been acquired in some supernormal way. If, on the other hand, the naturalistic assumption be false, if such knowledge has in truth been supernormally acquired, the inability of the psychoanalyst to trace its origin in the medium's mind would, in itself, be evidence in favour of a supernormal source.

It is not to be supposed that the psychoanalytic method can be applied to any and every medium. If it is true that a person cannot be hypnotised against his will, it is still more certain that he cannot be psychoanalysed against his will. Without the fullest co-operation and the most unflinching honesty on the part of the analysed person psychoanalysis is impossible. Moreover, it is a very painful process, and perhaps nothing but a strong scientific interest in the results, or the desire to be freed from psychoneurotic disabilities, would induce anyone possessing mediumistic powers to submit to a full psychoanalysis.

If the psychopathological explanation of the nature of mediumistic trance is correct we should expect that after such an analysis the medium would be "cured" of her mediumship, so that the ability to go into trance, or to produce automatic writing, would be lost. For one of the functions of psychoanalysis is to effect a new mental synthesis in which are included all those portions of the mind that have been split off and kept out of consciousness by repression. Such a redintegration of the medium's mind would preclude the possibility of going into trance, or of producing automatic script. This result, however, might be brought about even if the supernormal manifestations were truly supernormal, for there may be a necessary connection between dissociated states and the manifestation of supernormal powers.

If the psychoanalytic exploration of a medium's mind is to have the effect of banishing the very phenomena we wish to investigate, or, indeed, if there is any possibility of such a result, it is evident that opportunities for such exploration will be very limited. We cannot expect professional mediums to run the risk of losing the peculiar qualifications through which they earn their living, and we should have to rely on non-professional mediums or automatists who might be willing to sacrifice their unusual gifts in the interests of science. But even if such a person could be found, there are good grounds for doubting whether a successful analysis could be carried through. The mediumistic gift, regarded as a neurosis, is, like other neuroses, a

compromise between conflicting tendencies which affords some sort of gratification to the patient ; and unless there is the inducement of some greater satisfaction being obtained, the unconscious resistances to the analysis may be so great that they cannot be overcome.

We must not, therefore, be too sanguine that in psychoanalysis we have an instrument that will speedily let in light on the dark places of Psychic Research, but we may reasonably hope that in the course of time suitable opportunities for its application in this field may arise. When such an opportunity comes, the results cannot fail to be of interest to students of psychopathology and to those who take an unbiassed attitude towards the problems of Psychic Research. That it will give us further knowledge of the peculiarities of mediumistic trance cannot be doubted, but whether it will, or will not, give us an adequate explanation of the apparently supernormal phenomena associated with trance and its allied states time alone will show.

In the meantime, although there may be no opportunity for subjecting a medium to a full psychoanalysis, some of the technical methods of the psychoanalysts may, with advantage, be made use of in Psychic Research. The most important of these methods is the analysis and interpretation of dreams, and something of interest and value would certainly be learned by analysing the dreams of mediums and automatists. A considerable part of the evidence which supports the belief that knowledge is sometimes supernormally acquired has been derived from so-called telepathic and premonitory dreams. Such dreams are relatively common, and there should, in the future, be many opportunities of subjecting them to psychoanalytic investigation.

Another technical method, the word-association test, introduced into psychoanalysis by Jung, may have wide application in Psychic Research. The procedure is simple, and the test can be applied by anyone of ordinary intelligence, but the interpretation of the results demands considerable expert knowledge. The main outlines of this experimental method are now well known. A series of test-words is called out, one by one, and the person being examined is asked to answer to each, as quickly as possible, with the first word that comes to his mind. The time-intervals between the giving of the stimulus word and the verbal reactions to them are noted, and when the whole list of words has been gone through, the answers are classified according to these time-reactions and various other peculiarities which they may show. Certain stimulus words are then found to have a time-reaction so long, and other important features of the response to them are so

marked, that it is plain they have struck a mental complex which is of high emotional significance. These stimulus words are therefore spoken of as "complex indicators." When the association test is applied to a number of normal persons it is found that they fall into several groups whose type of reaction is distinctive, so that the reactions of a person belonging to one type could not be mistaken for those of a person belonging to another type.

This method can be used in cases of multiple personality and the reactions of the different personalities compared, but few observations of this kind have been recorded. We should expect, however, that the reactions of the various personalities would have much in common—at least, more than would be found if the personalities had separate bodies and entirely separate histories. When we know more about the reaction types of ordinary secondary personalities we may use the association method to test the claims of mediumistic controls. If they are ever what they purport to be, they should sometimes show reaction types so different from that of the medium that their claim to be extraneous spirits would receive considerable support.

An extension of this use of the word-association test in Psychic Research has been suggested by Mr. Whately Smith. He proposes that we should use this method, not merely to test the claims of controls, but to establish the identity of communicators. Except in the relatively rare examples of "direct control," the evidence in favour of a belief in survival—communications from dead friends—comes to us indirectly through the usual control or controls of the medium. Proof of the identity of the purporting communicator depends on the display, by the control, of knowledge or ability not possessed by the medium, but known to have been possessed by the communicator, and, perhaps, characteristic of him during life. Many people consider that the chief obstacle in the way of accepting such evidence as conclusive is the impossibility of assigning the limits of telepathy from the living, and Mr. Whately Smith thinks some test is needed which shall be as uniquely characteristic of the communicator's mind as a thumb-print, or a set of anthropometrical measurements would be of his body. This, he thinks, may be found in word-association reactions. He therefore suggests that persons still living, who, when they die, would be likely to communicate, should have their associations to a series of test-words recorded and preserved in such a way that they are known only to the person tested. If, after death, they purported to communicate, they should again be asked to react to the same series of test-words.

If, on comparing these new reactions with those recorded during life, it were found that the two sets of reactions were "identical or unmistakably similar," and different from those of the medium or automatist, the evidence of identity would, he thinks, be very strong.

It is not to be supposed that the actual reaction words would be the same in the two tests, even if the communicator were the person he claimed to be. This would not be likely to happen to any great extent in an association test repeated on a living person after a considerable interval of time. In ordinary association tests it is customary to take the reactions to the same series of words a second time, and this is done immediately, or very soon after going through them for the first time. It is then found that, although most of the original responses can be given, the previous response to certain test-words—those, for example, which had a long reaction-time—is forgotten, and a different answer is given. This difficulty of reproduction is, indeed, one of the characteristics of a "complex indicator." And although we could not expect the reaction words of the communicator in the experiment suggested by Mr. Whately Smith to be identical or unmistakably similar to those recorded during life, it might very well be with the dead as with the living that we should find identity of "type" in the two series of reactions, and also the occurrence, in the second series, of "complex reactions" to the test-words which in the first series had proved to be complex indicators.

Up to the present time no serious examination of a medium or automatist by psychoanalytic methods has been recorded. A superficial application of psychoanalytic doctrine was made by Dr. Amy Tanner and Dr. Stanley Hall in their inquiry into the trance phenomena of Mrs. Piper; but these investigators did not sufficiently discriminate between the importance to be ascribed to the psychological states of the medium and the problem of supernormally acquired knowledge. Most psycho-pathologists will agree with their opinion that the controls in the Piper trance are of the same nature as ordinary secondary personalities; and this is indeed the conclusion come to by Mrs. Sidgwick after an exhaustive examination of the whole of the Piper records. But their estimation of the evidence pointing to the possession by the controls of supernormally acquired knowledge is superficial and unconvincing, being little else than an enumeration of the possible sources of error, and the expression of a belief that one or more of these errors must have occurred in every instance.

There are many critics of Psychic Research who, like these writers,

deny that knowledge is ever supernormally acquired, yet take much trouble to refute the spiritistic hypothesis. But, if there are no supernormal happenings to be explained, there is no need to refute any hypothesis put forward to explain them. If those who deny the possibility of supernormal acquisition of knowledge are disposed to take any interest in Psychic Research, they should direct their efforts to the discovery of the normal sources of the knowledge which so many serious investigators think must have been acquired in some supernormal way. If all the seemingly supernormal elements in mediumistic communications can be traced to a normal source, both the telepathic hypothesis and the spiritistic hypothesis will become superfluous. The arguments for and against the alternative hypotheses—telepathy from the living, telepathy from the dead, and spirit possession—are of interest only to those who are convinced, or are prepared to believe, that supernormal acquisition of knowledge can and does take place.

Two questions have always to be asked when we are examining the data of Psychic Research: Is this thing true? If so, what is its explanation? Or, in regard to the special problem of mediumistic communication: Has this knowledge been supernormally acquired? If so, what is its source? To both questions psychopathology may have something to say in reply.

IMMORTALITY AND THE SURVIVAL OF BODILY DEATH AS PHILOSOPHIC PROBLEMS

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THE direction of man's activities in his incessant endeavour to explore, and hence to control, the environing realm in which his lot is cast, is inevitably, if unconsciously, determined by the more fundamental needs of his mental and bodily nature. Accordingly we find that in the gradual ascent of the race from its humble origin in the dim recesses of the primeval world, the special pursuits to which its energies are most unfailingly devoted vary gradually as progressive development continues and the character and aims of the basic springs of action come to be more clearly realised in the consciousness of the individual.

Chief among these basic impulses is that which aims at conservation. Conservation—yes, but of what? And it is just here that we find in particular that constant shifting of emphasis which is the characteristic mark of progress as it passes onward from the purely material to the more and more purely spiritual. In his primitive state man's chief concern is his body. Nor is this to be wondered at. In the development of conscious experience the individual becomes first of all aware of an external world in which he distinguishes his body as a part, but a part so intimately connected with his feelings and sensations that he inevitably identifies it with himself. For him, self-conservation can only mean the preservation in its active integrity of his body. As a consequence of this, all his energies are devoted to ministering to its needs. He learns in the hard school of experience the laws of its relation to its environment, living and dead, and applies the knowledge thus gained (albeit the application is instinctive, not reflective) to its safe preservation. At this stage, then, his most pressing needs are the needs of the moment, or at most of the near future. Given food and shelter, and he is satisfied—untroubled by, nay, incapable of, visions of a distant morrow.

This phase, however, is a transient one. With the formation of the tribe, and the new impetus to progress which is consequent upon social co-operation, a distinct change takes place in the mode of consciousness of the individual. He now begins to be aware of others as the subjects of duties and rights in which he partakes.

This realisation of other persons as beings of equal status with himself carries with it as a natural complement the more explicit realisation of self as an entity distinct from, and at least to that extent transcending, the body with which it is associated. In other words, social consciousness and self-consciousness develop *pari passu*. But the development is very gradual. Only after the lapse of ages does man come to speak of his "soul," envisaging the latter as a precious possession ultimately independent of, though temporarily burdened with, his body. Note that at first the soul is still regarded as an object possessed, and in its preservation now and hereafter the deepest hopes, the gravest fears, are centred. This notion of the soul as a possession lingers on to this day in common speech, if not in thought. Yet it is evident that the only reason we can have for attaching value to the conservation in existence of the soul is that it is identical with the individual himself—it is not a possession of the self, but a mere synonym for it. I am not interested to know whether some shadowy replica of me will survive the death of my body. I want to know whether I, my very self, will survive.

There is a third stage in the development of the desire for conservation. It is, however, attained by very few. They are those who feel that the fate of the individual matters little provided there is that in the constitution of the universe which ensures the ultimate triumph of the Good. The individual may be annihilated, or may perchance be absorbed into the world-spirit at the cost of his individuality—it matters not if only his contribution to the working-out of that final purpose be preserved. In such creeds, the conservation of the individual is replaced by the conservation of value. Yet one cannot help feeling that the progressive achievement of this ultimate Good would, if unappreciated by those in the result of whose labours it alone consists, constitute but a barren triumph.

Such a selfless view of reality as that just indicated is, however, not possible to the vast majority of people. For them the great question which calls most urgently for answer is whether they and their friends and loved ones will survive the incident we call "death," as individual personalities recognisable as those who formerly trod this earth. The

urgency from the human point of view of this problem of "personal immortality," as it is frequently called, is reflected in the philosophic thought of all ages. In philosophy it takes in the first place the form of a search for something permanent, whatever it may be, in that ceaseless changeable flux of transient elements which is apparently the main characteristic of the world as we know it. The problem of Change and Permanence, their relation and reconciliation, has always been the central one for philosophy. It may be soluble, but even so it is doubtful whether the solution is capable of explicit formulation in words, for the greater part of the difficulty itself arises from the inadequacy of conceptual thought for dealing with the facts we are here concerned with. In any case, on this main problem the permanence of the individual self hangs as a logically subsidiary issue; but the best way to the solution of the former may be found to lie through the consideration of the latter.

At this point, however, a note of warning must be sounded. Just because of the very urgency of the matter, and of the tremendous insistence with which it ever and anon occupies the centre of human thought, it is necessary to take especial care lest desire outstrip reason and our conclusions be rendered so far worthless. The colouring of belief by desire, and the prejudicial bias which it gives, even though unconsciously, to our estimation of the evidence provided by reason and by empirical fact, have hitherto militated not only against the provision of a purely rational solution of the difficulty, but also against a precise logical formulation of the problem itself. Accordingly it must be our primary concern to detach ourselves as far as we may from the desires natural to us, and to take up the whole question *ab initio* from a dispassionate point of view. We shall find that in this case, as in many others, there is more than one distinct issue involved, and it will be part of our task to disentangle these issues. It will appear that the general problem of Immortality is on an entirely different footing from the problem of survival of bodily death, although the two are hopelessly confused in the minds of many people. The first, in so far as it is capable of solution at all, must be soluble on general grounds. The second, dealing as it does with particular facts of existence, can only be settled conclusively by a consideration of empirical evidence. With regard to the first, then, we must endeavour to formulate the problem precisely, to determine to what extent it is capable of being solved, and to elucidate the general principles on which the solution is based. With regard to the second, we have to consider the facts

alleged as providing evidence of survival, and to obtain a criterion by means of which we may try whether they are actually evidential in the manner claimed.

All knowledge is based on the immediate experience of the individual. This is true not only of that vast confused mass which constitutes the instrument of practical "common sense" for dealing with the ordinary situations of life, but also of those more systematised bodies of knowledge which make up the accumulated fund of the special sciences. The principles of astronomy, for example, are simply generalisations obtained by abstraction from the direct observations of numerous observers. It follows that if we wish to investigate a problem from its very origin by avoiding any of the assumptions made in current opinion on the subject, we must turn in the first place to a consideration of the nature of the individual experience.

The growth of experience both in the individual and in the race falls naturally into three well-defined stages—sense-perception, imagination, and conception. The first is the basis of all; from it the second immediately derives; but in the development of the third there is involved in addition a social factor. Very little reflection is required to make it clear that in all experience two main factors are involved. There is the "I" who perceives, thinks, wills, imagines, and the content which makes up what is perceived, thought, willed, imagined. These are termed respectively the "subject" and the "object" of experience. We say that the object "is presented to" the subject, who discriminates various parts of it by the movements of attention. But although we may in reflection distinguish between these two factors, actually they are so intimately dependent the one on the other as to be incapable of separate existence. For a subject to whom nothing at all was presented could no more exist than could a thought without a thinker. The very existence of the subject consists in his experience, that is in the presentation of objects to which he attends; while the being of the objects thus cognised equally depends, at least in part, on the fact of their presentation to a subject.¹ Subject and object are complementary factors constituting in their inseparable existence the unity which we call the individual experience.

Perhaps the most important characteristic of sense-experience, and

¹ This view of the partial dependence of perceived objects on the percipient is opposed by the Neo-realists. For a criticism of their objections I may perhaps be permitted to refer to my book on *Spiritual Pluralism and Recent Philosophy*, pp. 92-103.

the one having the most far-reaching philosophic consequences, is its private and incommunicable nature. Our sensations are peculiarly our own. Common sense generally refers them to entities existing independently of any particular percipient, of which entities they are the effects on us. As to the validity of such a belief, more must be said shortly; but in any case the privacy of the sensation or "sense-datum" (to give it a more satisfactory name) to the particular individual who perceives it must be admitted. From the fact of this privacy the incommunicability of the nature of sense-data follows as an immediate consequence. To realise this clearly we need only consider how impossible it would be, for example, to explain to a man blind from birth exactly what we mean by (say) "red." And it equally follows that we have no guarantee whatever that the appearance to one person of what he calls "red" is the same as the appearance to another person of what he also calls "red." We cannot communicate our sense-experience, but the race has evolved a substitute through the medium of language and gesture. This substitute consists in the establishment of a *correspondence* between particular sense-data of different individuals, and the fact of this correspondence is signified by the adoption of a common name as the symbol of that group of sense-data. But it must not be forgotten that the establishment of this correspondence is for each individual a fact *within his own experience*. The participation of other individuals in the knowledge of this correspondence is not for him an immediately given fact, but an *inference* from what is immediately given, namely the words and gestures forming part of the bodily manifestations of these other individuals.

Is such an inference justified? This is really part of the larger question to which reference was made above, namely: Can we infer from our sense-data the existence outside our own private experience of entities independent of us of which these sense-data are in some sense or other the "effects" or "manifestations"? In particular, do other people exist?

Now, *prima facie*, the objects of individual experience give evidence of the existence of nothing beyond themselves, and certain schools of thought maintain that this is indeed true, and that the further postulation of entities in addition to sense-data, as the ground of those data, carries with it assumptions that cannot be logically justified. Such a view, if pushed to extremes, leads inevitably to solipsism, a most uninteresting and infertile result. But there are probably sound, though perhaps not absolutely conclusive, metaphysical reasons which justify

an individual in postulating the existence of other entities besides himself and his sense-data, and at any rate this postulation is irresistible in practice. The next step therefore lies in the selection of an hypothesis as to the nature of these entities of which we may call sense-data the "appearance"; and it will be apparent in the sequel that the result of this selection has a supremely important bearing on the interpretation of the facts and theories of psychical research.

There are four possibilities as to the nature of the entities in question. They may be (1) partly material and partly spiritual, or (2) wholly material, or (3) wholly spiritual, or (4) neither material nor spiritual. In the last case, however, they would be quite unknowable to us, so that recourse should be had to such an hypothesis only if all others prove unsatisfactory.

In considering the first two possibilities we are faced at once by a difficulty, namely as to the interpretation of the word "material." Philosophic materialism regards matter as a substance atomic in nature, built up from elementary indivisible parts (formerly "atoms," now "electrons"), having certain specific properties of which the most characteristic is inertia. These unitary entities are not directly perceptible, but by the forces they exert and the radiations they originate they produce physiological changes in the human body which give rise to sensation. Everything, mind included, is thus regarded as the product of various combinations of these material units. In this way a curious inversion, in thought, of the real state of affairs has been produced. Whereas in actual experience the things most real and concrete for us are our sense-data, in materialistic theory the actualities are the atoms and electrons, sense-data being mere unsubstantial "epiphenomena" (to use a term much in favour with materialists) observed to accompany certain peculiarly complex aggregates of atoms (namely higher organisms) in their interaction with other matter. The whole argument is of course a gigantic fallacy. For what exactly are these "atoms," "electrons," "material bodies," etc.? "The entities referred to in the bodies of propositions which constitute physical and chemical science," must be the reply of the materialist—and this exposes the fallacy at once. For the data of natural science consist in the sense-data of particular individuals, and in nothing else whatever; while every verification of a scientific generalisation consists of necessity in an appeal to the occurrence of certain sense-data in the experience of one or more particular individuals. It follows at once that the propositions of natural science, however their ultimate

meaning be disguised, must necessarily be statements about sense-data and about nothing else ; they are, in fact, tremendously condensed assertions about the relations of co-existence and succession which subsist between sense-data, and the terms employed in them (such as "electron") are merely artificial concepts, made up of logical constructions of sense-data, which serve the purpose of reducing the propositions to a manageable brevity. The "atoms" and so on of the materialist are thus *constructions* of sense-data and *not inferences* from them.¹ Hence those entities which constitute the ground of sense-data are, whatever they may be, utterly unlike the inert particles of which the materialist speaks, for even when he speaks of such particles he is really only speaking about sense-data after all, and not about the ground of such data.

The above considerations rule out the first two of the possible hypotheses as to the ground of sense-data, for not only do they dispose of materialism as a serious metaphysical theory, but they also render it clear that ultimately we must replace the abstract and artificial dualism of mind and matter, which has been found useful in formulating conveniently some of the results of science, by that duality of subject and object which is comprised in the unity of the individual experience.² This duality in unity is the concrete actuality from which mind and matter, as ordinarily conceived, are abstractions.

We are left, then, with the hypothesis that the ground of our sense-data is spiritual, that is, constituted by other subjects of experience, for by "spirit" we can only mean "subject of experience." On this theory the object of experience is regarded as the appearance to the subject of other subjects, and the changes which take place therein as the product of his interaction with the latter. Hence the privacy of his experience does not cut him off from all knowledge of the reality outside that experience, for he is enabled to interpret it as the manifestation of other individuals *essentially* akin in nature to himself. These individuals must, however, be regarded as varying indefinitely in degree of development. At the far end of the scale we have inorganic matter, which may be considered as the appearance to us of individuals of extremely inferior mentality whose actions (as with all inferior types of mind) are practically entirely habitual in type and

¹ For a conclusive demonstration of this, cf. Bertrand Russell, *Our Knowledge of the External World*, especially Lectures III and IV.

² For a detailed exposition of this point, cf. James Ward, *Naturalism and Agnosticism*, 3rd ed., Vol II., part IV, especially pp. 110 ff.

lacking in any observable spontaneity. We are thus enabled to make broad generalisations as to their behaviour in given circumstances, and it is in such generalisations that the so-called "Laws of Nature" consist. This tendency to the formation of fixed habits is an important characteristic of the individual mind or subject, but it is no less the case, on the other hand, that the individual is capable of learning by experience, and hence of indefinite progressive development. In this fact the key to the riddle of Evolution is to be sought.

On the theory outlined above, then, reality is regarded as constituted by a plurality of spiritual agents, the experience of each consisting in his interaction with the others. Such a theory, however, is incomplete, for it gives no account of the ground or essential condition of this interaction. A mere plurality of separate individuals cannot contain within itself the ground of any concrete relationship between those individuals. Interaction between them seems, in virtue of their isolated individuality, to be inconceivable. It is therefore necessary to postulate in addition a single universal entity immanent in the many; and in this way a satisfactory interpretation is obtained of the two fundamental and equally important aspects of reality, its unity and its plurality.

It is no part of our purpose here to justify completely this metaphysical hypothesis. The present writer has attempted to do that elsewhere.¹ But we may adopt it henceforth as a working theory in attacking the particular problems with which we are now concerned. Yet it is perhaps worth while to call attention to one important fact which may be regarded as providing corroborative evidence of the truth of the theory. For it would follow from the latter that in the nature of the spiritual agents we have mentioned, and in man in particular, there should be found elements both of individuality and of universality. Now it is certainly a fact that a man is a remarkable mixture of the individual and the universal. He shares with his fellow-men, and, indeed, with all living beings, certain general types of activity, but within these types there is indefinite variety of detail. And again, his emotional impulses are partly egoistic, partly altruistic; while with an irresistible inclination to assert his own individuality he combines an equally irresistible inclination to social co-operation. His life is thus essentially the expression of his nature as an unique being who yet shares vitally in the common existence of the Universe

¹ In *Spiritual Pluralism and Recent Philosophy*.

as a whole ; and although if we look lower in the scale of life this blend of individual and universal may not at first sight be so apparent as in man, yet the deeper insight afforded by a consideration of the course of evolutionary development from the lowest to the highest renders it abundantly plain that that development is itself the expression of the combination of individual and universal tendencies in the activity of numberless agents. Everywhere we find independence merged inextricably with interdependence, and the uniqueness of the individual a necessity to the whole of which he is a part, while he yet depends on the whole for his very existence as an individual.

It now becomes necessary for the furtherance of our investigation to determine the exact status of space and time in reality, in the light of the hypothesis we have been considering. Now we habitually speak of space and time as independent existents somewhat analogous to receptacles, *in* which material objects have their being. But it is clear that we cannot accept such a conception uncritically, and this more especially because we found that material objects themselves turn out to be very different in nature from what the deliverances of ordinary thought would lead us to expect. The concepts of physical science, such as "atom" and "electron," no less than those of everyday life, such as "table" and "chair," involve in fact nothing more than the private sense-data of various individuals. They consist in certain groups or classes of sense-data, and do not refer to entities additional to the latter, for if they did they would be so far invalid, seeing that all empirical observation and verification consists, as was previously pointed out, in the perception of sense-data and of nothing else. We must therefore conclude that the concepts of space and time call for very careful investigation, and that this investigation can be conducted satisfactorily only by a consideration of the manner in which these concepts have developed in the experience of the individual.

In space as ordinarily *conceived* we find a certain quality and a certain type of relation. The former is extension, the latter is made up of such relations as "to the right of," "to the left of," "above," "below," "before," "behind." But qualities must belong to something, and relations can only be actual if they subsist between definite entities. Hence the concept of space as an independent existent is beset with contradictions, for we seem left with nothing but an unattached quality and a mere network of relations without concrete relata. The difficulty is solved, however, so soon as we realise that conception grows out of perception, and hence that the concept of space must be

based on the perception of sense-data. For the latter provide the necessary concrete element. To fix our ideas, let us confine our attention for the moment to visual sense-data. We find that, among other qualities, they are characterised by a particular one which may be described as "size" or "voluminousness," and to which psychologists give the name of "extensity." These more or less extensive patches of colour which constitute visual sense-data are also observed to stand to one another in a certain type of relationship among other types. This comprises the relations which we name respectively "to the right of," "to the left of," and so on. It is therefore evident that the term "spatial" is *merely a name*, and nothing more, which we give to this particular quality, and this particular type of relation, of sense-data. The sense-data are the concrete actualities. Apart from them, the quality and the relations are sheer abstractions, and space is itself an abstraction, for it is essentially conditioned by the very things it is used to describe. We have, not an independent empty space in which objects have their being, but simply certain entities (namely sense-data) possessing a certain peculiar quality, and standing in certain peculiar relations to one another, to which we arbitrarily give the name "spatial." Thus, although we shall continue to use the phrase "in space" for convenience, it must not be supposed to carry any other meaning than that the entities in reference to which it is used are objects having "spatial" characteristics.

Tactual sense-data possess characteristics akin to those of visual data. They have a certain massiveness or extensity, and they stand in certain positional relations. The latter are observed by movements of the body and limbs, just as visual spatial relations are observed by movements of the eye. The perception of tactual space is independent of the perception of visual space, so that each individual subject possesses, as it were, two private spaces, one of sight, the other of touch.¹ A one-one correspondence may, however, be established between the elements of one space and those of the other by means of various movements, so that the subject comes to think of a single space of which sight-space and touch-space are "aspects." But he is apt to forget that what he calls "aspects" are really the given concrete actualities, whereas the supposed single space is simply a logical construction.

This limitation to two spaces is a consequence of physiological structure. Were our ears as mobile as our eyes, we should have a well-developed perception of an auditory space.

In a somewhat similar way, the conception of a single, all-embracing, "public" space, as it may be called, arises from the perception of the particular private spaces of individuals, the private spaces being regarded as "aspects" of public space. The individual subject arrives at this conception of a single space common to all by intercourse with other subjects; for he finds that by means of this intercourse he is enabled to establish a one-one correspondence between the elements of his own space and the elements in the space of any other subject. To each element in a given private space there corresponds one and only one element in every other private space, and consequently one and only one element in public space. But it is of the first importance to remember that the private spaces are the concrete realities, public space being an abstract conceptual construction. Moreover, it should be noted that the nature of the relation between two elements in a particular private space is quite different from the nature of the relation between two elements each of which is in a different private space. The former is the type of relation termed "spatial"; the latter consists merely in a one-one correspondence; and in connection with the establishment of a correspondence of this kind, it should not be forgotten that it is for each individual a fact entirely within his own experience. It is based on the language and gestures of others, and these form part of his object of experience.

Mutatis mutandis, what has been said of space is true also of time. The concept of a public or universal time is built up from the private times of individual perceptual experience. The private times, again, are simply based on the possession by sense-data of certain special characteristics to which we give the name "temporal." These temporal features are the quality of duration (*i.e.*, persistence as sensibly unchanged elements), and the relations of succession—"before" and "after." Hence, as before, the actualities are sense-data possessing special characteristics. The concept of a time in which material bodies exist is merely an abstraction from this, and consequently the phrase "in time" ultimately carries no further meaning than that the entities to which it refers possess temporal characteristics. As in the case of space, to each element in a given private time there corresponds one and only one element in every other private time and in public time; and again, it is important to notice that the relation between elements in different private times consisting, as it does, simply in this correspondence, is quite unlike the relation holding between elements in the same private time.

Summing up, then, we may say that the space and time of ordinary conceptual thought are logical constructions arrived at by a continued process of generalisation and abstraction from the nature of what are the given concrete entities, namely the particular sense-data of particular individuals. In experience as it actually is, there is no separation of the spatial and temporal aspects of presented objects, nor can the separation in reflection of these objects from the subject to whom they are presented be anything but artificial. In view of this, it is noteworthy that the results of certain empirical observations have recently compelled a far-reaching modification in the outlook of physical science. For most purposes the latter can accept the concepts with which it works as if they accurately represented fact, and can work out its theories in terms of a space, time, and matter independent of any particular observer. But in the end it must take account of the fact that these concepts are but abstractions from private experiences relative to particular individual subjects, spatial and temporal features being themselves partial aspects of sense-data in which they are actually confluent. The realisation, as the result of observation, of the relativity of phenomena to the particular "point of view" (i.e., to the particular percipient) and of the confluence of space and time, has led to the formulation of the famous principles of relativity and of equivalence, with consequences marking an epoch in the history of science.

From the foregoing analysis of the nature of space and time, it is evident that spatial and temporal ideas are applicable only to sense-data, that is to elements *within*, and forming part of, that presented whole which constitutes the object of the individual experience. What, then, are we to say of this object considered as a whole? Is it a spatio-temporal entity? Obviously it is not. For consider, in the first place, the question of space. The spatial character of sense-data has been found to consist in a combination of their quality of extensity and their positional relations to one another. Both the quality and the relations are essential elements in spatial character. Now if we consider the object of experience *as a whole*, we can see at once not only that the idea of extensity is not strictly significant of it (for a brief reflection shows that it cannot be considered to be either bounded or unbounded), but also that there are no entities to which it is positionally related in the way that the sense-data within it are related to one another. Its relations to the objects of other individual experience are, as we have seen, not spatial, whatever else they may be. Precisely

similar considerations hold from the point of view of time, so that combining the two aspects (the spatial and the temporal) as they are actually combined in sense-data, it follows at once that although the parts of an object of experience are spatio-temporal entities, it is not itself a spatio-temporal entity. Spatial and temporal concepts are therefore quite inapplicable to it, and this is a most important consideration for our present purpose.

If, on the other hand, we shift our attention to the subject of experience, we discover still more cogent reasons for concluding that that subject can in no sense be regarded as a spatio-temporal entity. For not only can we apply in this case an argument analogous to that set forth above in connection with the object considered as a whole—we can also see that the subject does not even consist of parts possessing spatial and temporal features. It is an essential characteristic of the subject that he is *not* a whole of parts, but an *indivisible unitary entity*. To realise this clearly, one need only consider how absurd it would be to make such statements as: "This part of myself is before that part," or "That part is to the right of the other part."

The subject, therefore, is not in space or time. At first sight this conclusion might appear to be contradicted by the fact that we habitually speak and think as if we were in space and time. But it turns out on examination that the spatial and temporal references in all such judgments really apply exclusively to parts of the object of experience. For example, suppose I say, "I am going to London on Saturday." Ultimately this means nothing more than "There are within my total object of experience certain parts (the sense-data which for me constitute "London") having certain spatial and temporal features (the latter constituting "on Saturday")." I do not myself enter into this spatio-temporal complex as a constituent (although I *perceive* it), but my body does; and with regard to the latter we must not forget that although the subject is not in space or time, yet the manifestations to other individuals of his active existence *are* in space and time, for they constitute parts of the objects of experience of these other individuals.

The preceding discussion evidently has extremely important bearings on the problem of immortality. For the problem of immortality is largely the problem of the nature of time. Stated in ordinary language it simply asks, "Do I exist for ever?" Now the whole difficulty clearly centres round the phrase "for ever"—a phrase containing a temporal implication. But it has been shown

above that a subject of experience is not a temporal entity, so that the conjunction of "I" and "for ever" in the question, "Do I exist for ever?" is strictly meaningless. Hence, if there is a problem of immortality at all (and perhaps, in one sense, there is not), we must try to find a more significant statement of it.

Now our existence consists in our experience, and the latter consists in the presentation of an object to which we attend. Thus we might shift the temporal reference from the subjective to the objective side of experience, and accordingly ask: "Does my object of experience continue for ever, or does it come to an end?" This change, however, though it may carry us a step in the right direction, is not in itself sufficient, for the object of experience in its completeness is not a temporal entity, so that temporal ideas such as "begin," "continue," "end," are not applicable to it. In fact, the only entities to which they *are* applicable are elements *within* the object of experience. Therefore we must state our problem in terms of the latter. It then becomes: "Is there a time when no more such elements will be presented to me?" What, then, is the time referred to? It cannot be simply my private time, for this is conditioned by my sense-data and has no existence apart from them, so that the question in the last form would then be equivalent to: "Is there a time for me, when there is no time for me?" which is obviously quite meaningless. It follows at once from this that the problem of immortality has no real concrete significance for the individual. His annihilation could not be a fact for him; nor, indeed, could it be a fact for anyone else, for he himself does not enter into the experience of others but only his objective manifestation. The cessation of the latter no more implies his annihilation as a logically conclusive result than the normal disappearance of another person from our field of view implies his annihilation. It is true that in the latter case the entire body of the person, as well as his voice and gestures, cease to be apparent, whereas in the former case the body remains although the voice and gestures cease. This last fact does not, however, carry us any further from a purely logical point of view.

As a matter of philosophical interest, it is possible to give a logical significance to the question we have been discussing by putting it in terms of public time. Since the latter is constructed by correlating the individual private times, the problem finally becomes: "Are there future elements in the experiences of other individuals to which there are no corresponding elements in my own experience?" This is the

bare residuum of the general problem of immortality brought to its ultimate logical terms. The problem as thus stated is perfectly significant but quite insoluble, for there would be no means of demonstrating the breakdown in the correlation even if it existed, seeing that for each individual the establishment of a correlation consists, as was previously pointed out, entirely of happenings which take place within his own experience. He has no means of getting at the incommunicable experiences of others. The insolubility of the problem is not, however, of practical importance in view of its entire lack of concrete significance for the individual.

We may now pass on to the second of the problems we set out to investigate, namely, future life as a survival of bodily death. It is evident that the result of our consideration of the general problem of immortality throws no light on the question of survival. The former depends on the general nature of experience; the latter is concerned with certain events within experience.

Let us try to give a precise statement to the problem of survival. The bodily death of an individual consists for another person in a certain complex of sense-data in the latter's object of experience. Such a complex is far from being unique even in the experience of one observer, for the majority of people are witnesses of more than one death. For the deceased himself, however, his bodily death must be constituted by a complex of presented elements very different from those of the observers, a complex, indeed, which is probably quite unique in his experience. Survival of death, then, so far as he is concerned, can only mean the existence in his object of experience of presentations standing to the complex constituting for him bodily death, in the relation "after." The problem can therefore be stated significantly in terms of the private time of the individual concerned, as follows: "Are there in the succession of elements which is the private time-series of any given individual, elements which are successors of those constituting the complex which is bodily death? and further, are such elements correlated (as regards time) in the usual way with elements in the experiences of others which are successors of the complexes which constituted for these others the death of the given individual?"

Clearly, then, the statement of the problem in this form brings out the fact that it is concerned solely with particular events *within* the experience of particular individuals. Hence it cannot be solved on general grounds alone, but only by appeal to empirical evidence. So

far as we alone are concerned, while we yet remain on this side of the veil, such empirical evidence can only consist in communications from the other side. Granted that the results of psychical research are such as to warrant the conclusion that *apparent* communications, at any rate, exist, we have then to classify the types under which they are found to occur, to attempt to establish a philosophical criterion by which their evidentiality may be judged, and finally to determine the limits of applicability of this criterion.

Phenomena which may be seriously considered as affording possible evidence of survival fall mainly into two classes. These are : (1) Apparitions, (2) Automatic speech and writing. Each of these divides into two sub-classes. As regards the first class, there are those apparitions which seem to be quite purposeless, and those which seem to be endeavouring to communicate, or to give evidence of identity, by gesture or otherwise. As regards the second class, an important distinction must be made between cases when the automatic writer or speaker is in a trance, and cases when he is not entranced.

A brief consideration is sufficient to show that the purposeless type of apparition affords no evidence of survival. In such cases the phantasm is observed, generally by more than one person and on more than one occasion, to go through a certain routine procedure with no apparent end in view beyond itself. Frequently the phantasm is recognisable, showing that it is connected in some way with the individual who was formerly on earth, but it does not follow that at the time ¹ the phantasm is observed the individual, of whom it is an appearance, is actually trying to bring about such an effect, and this for the following reasons : Action at a distance in space is a commonplace in everyday life, so far as the material world is concerned ; it is, indeed, the invariable rule according to the evidence of empirical observation. From material bodies (including the human organism) radiation is regarded as being continuously propagated in all directions, so that the effects of every happening in such a body travel outwards in space to an indefinite distance. There is a principle analogous to this in the world of mind. For it appears that individual minds are able to influence one another when their material manifestations (namely their bodily appearances) are at a distance in space from one

¹ Hereinafter the terms "space" and "time," if not qualified, will be used as meaning public space and public time respectively. It will be remembered that all statements about the latter can be interpreted in terms of the private spaces and times of particular individuals.

another, which, in some of the cases recorded, is very considerable. The evidence for this process of "telepathy," as it is called, is at least as great as that for many accepted facts in natural science. It must not be supposed, however, that telepathy depends on a form of material radiation, for the analogy between the two processes is far from close. In particular, telepathy, if it depends on spatial distance at all, is connected with it in a manner altogether different from that in which radiation and space are connected. The quantitative effect of radiation diminishes very rapidly as the distance from the source increases, in accordance with the inverse square law. But this is not the case with telepathy. Indeed, the existence of telepathy and its comparative independence of space can be inferred from our hypothesis as to the nature of reality. In a plurality of spirits linked by the immanence in all of a single concrete entity, the actions of each (whether of thought, word, or deed) must inevitably influence all the others in some degree. This fact is the basis of telepathy. Moreover, since, as we have seen, spirits or subjects of experience are not spatial entities, telepathy is so far independent of space, though its effects may be manifested in space. We have, in fact, a non-spatial agent whose act is manifested in one way by a spatial series of events connected by relations of distance. Thus every act of every individual subject is partly manifested in the phenomenal world by a string of events propagated in all directions through space, and of indefinite extent.

With suitable modifications, a precisely analogous argument applies to events distant from one another in time. In the material world, just as the effects of events are propagated through space, so are their effects also propagated through time in a continuous sequence. The effects of every happening in the phenomenal world march onward through time in an indefinite succession. Similarly, just as the individual mind can produce effects in space at a distance from its bodily manifestation, so may we suppose that it can also produce effects which are distant in time. This ubiquity, as it were, in space and time of the phenomenal consequences of subjective acts becomes clearer when we remember that the subject is not in himself a spatio-temporal entity, so that each of his acts so far as it is manifested in space and time might be expected to appear not merely as phenomena at special isolated times and places, but as a group of events "covering" the indefinite extent of the space-time continuum in the sense that in every region of space at *some* time and at every epoch of time in *some* place there are phenomena which are the manifestation of the

given subjective act. In general, the majority of these phenomena may not be perceived, partly for lack of suitably "placed" observers, partly, no doubt, for other reasons of the nature of which we are at present ignorant. But in particular cases circumstances may arise favourable to the production and the perception of unusual effects, and apparitions such as we are considering may quite probably be among cases of this kind. At all events, it is clear that we have very little ground for directly connecting the apparition as a part of the observer's object of experience with anything occurring at the correlated time in the experience of the individual (assuming his survival) of whom the apparition is a manifestation; and consequently the apparition affords no presumptive evidence of the survival of that individual.

Coming to cases of the second type of apparition, namely, those in which attempts at communication seem to be involved, we see that the presence of this additional factor will not allow us to apply the previous argument, at least without very considerable modifications. Logically, perhaps, we are still on the same ground, for we might regard even these apparitions as effects at a distance in time, and not of necessity directly correlated with anything present in the mind of the manifested individual at the time when the apparition is observed. We can hardly look on the matter in this light, however, from a practical point of view, for if we push the argument to its ultimate logical conclusion we should be compelled to regard the normal bodily manifestations to us of other people with the same suspicion. We are, in fact, led back to a difficulty mentioned earlier in this paper, namely, that since we can only observe events taking place within our own private experience we have no strictly logical grounds for making inferences about things outside that experience. In practice, however, we are compelled to assume that other subjects of experience exist and that their experiences are really correlated with ours in the way they appear to be, judging from their bodily manifestations such as gesture and speech which form parts of our own object of experience. But if we make these assumptions in normal cases, we must extend them also to the unusual case of apparitions.

The evidence for survival provided by communicating apparitions is therefore the same in kind as that given by ordinary bodily appearances for the existence of other people in this earth life. There is, nevertheless, one important difference between the two cases. In ordinary life the active existence of other people is manifested in two

ways : (1) Directly, by sense-data, mainly of sight, sound, and touch ; (2) Indirectly or symbolically, by speech and gesture through the medium of which the thoughts of others are communicated to us and incidentally the strongest evidence, perhaps, of their identity is afforded. As regards apparitions, the second type of evidence is present, differing only in degree from that occurring in ordinary life, but while the first type is also present to a certain extent there are in general important elements which are absent from it. Between the sense-data of sight, sound, and touch, which constitute the bodily appearance of an individual, there exist certain spatial correlations. In the case of apparitions there is generally an important breakdown in these correlations, notably in the case of touch. Visible apparitions of the communicating type are frequently audible, but there is little or no evidence for their being tangible ; and this is the main reason why we tend to regard them as in some way fictitious, for we associate tangibility in particular with reality, owing to the muscular sensations of effort opposed which are produced by the tangible resistance of objects. But there is no logical reason for regarding tangibility as more concrete than visibility and audibility, and we may therefore conclude that the evidence of apparitions differs from that of ordinary bodily appearances in quantity only, and not in quality.

We have now to consider the second type of evidence for survival, namely, that furnished by automatic speaking and writing. In this kind of evidence we are limited, when attempting to fix the identity of the communicator (if there is one, other than the medium), to interpretation of the messages received ; there is no direct evidence of identity as in the case of a recognisable apparition, except in so far as handwriting or intonation may in some cases be recognisable.

When people are discussing matters of this kind, they often make use of the phrase "the subconscious self," generally attaching a very vague meaning to that term. It is only necessary to remember, however, that the subconscious self is *not* a "part" of the subject of experience. The latter is an indivisible unity, and not a whole of parts. On the other hand, the subconscious self is simply a certain complex of ideas which remain for the most part below the threshold of consciousness (hence the name "subconscious"). The term "self" is used in connection with this complex because it forms part of the individual's conception of himself as an active participator in the business of life. Hence, when we say that anything is "due to the subconscious self," we can only mean that it is due to a rising of this

complex of ideas above the threshold of consciousness ; or, in a wider, but not strictly accurate, use of the phrase, that it is due to the rising of certain subconscious ideas (of *whatever* kind) into full consciousness.

The most important class (from the point of view of evidentiality) of motor automatisms is automatic writing when the medium is not entranced. Here it is possible for the medium to carry on an original line of thought or conversation, while his hand writes down the words symbolising a totally different line of original thought. Now it is possible for the same subject to perform two actions at once, one original and the other automatic or habitual, and to be quite unconscious of the latter. It is also possible for some subjects to carry on two or more original lines of thought or action, more or less simultaneously, by rapid oscillations of attention ; but in this case the subject is fully conscious of all his actions. It is not, however, possible for a subject to carry on two or more *original* lines of thought absolutely simultaneously and yet to be *fully conscious of one and quite unconscious of the others*. We must therefore conclude that many of the products of automatic writing are due to *subjects other than the medium*. Whether these subjects are really spirits inhabiting the next world, or whether they are other people in this world producing effects by such processes as telepathy, is a question that can only be settled for each particular case on its own merits. But it may be remarked that many of the communications received strain the hypothesis of telepathy from the living to an impossible extent. There might still, of course, be the logical alternative of regarding these communications as effects distant in time ; but practically, we cannot adopt this explanation for reasons pointed out above in connection with communicating apparitions. Moreover, these reasons are here strongly reinforced by the continuity and coherence of much of the script produced by automatic writers, even when not entranced.

The evidence provided by trance writings and speech is more valuable in general as corroborative of the evidence obtained from mediums who are not entranced than as information of intrinsic worth. For in the case of an entranced medium it is much more difficult to rule out the possible agency of the subconscious self. The fact that the medium afterwards remembers nothing of the happenings during trance is no argument against the possible action of the subconscious self, for in the case of the hypnotic trance a like oblivion nearly always occurs, although during the trance the patient is quite conscious of his actions. Hence in experiments on trance communications

it is necessary to resort to special devices to rule out such agencies as the subconscious self and telepathy from the living. The best known and most efficient method of accomplishing this is that termed "cross-correspondence,"¹ and when this is adopted the results obtained are extremely valuable, for practically every objection is countered in advance except those depending on special philosophical arguments (such as "action at a distance in time") of the kind previously considered. In any case, there is little doubt that where genuine spiritual agencies are at work, the method employed by the "control" in using the medium's bodily organism is essentially different according as the medium is entranced or not.²

Finally, in deciding as to the presence of a spirit in such cases, and as to the genuineness of the identity claimed, we can only apply the criterion we have already determined. That is, we have here signs essentially like those by which we ordinarily recognise the presence and identity of a living person. The only difference is one of degree, consisting in the absence of certain characteristic signs. In motor automatism the identifying marks of sight and touch are absent; we have only such things as characteristic modes of expression; description of past events known only to the person whom the spirit claims to be, and to certain of the observers (not including the medium); and, perhaps, recognisable handwriting or intonation. The case is analogous in many ways to telephonic communication between two people. We may obtain the same sort of evidence of identity as we have of the identity of a person speaking to us on the telephone. The results obtained by applying our criterion will evidently vary much with particular cases; but if we are inclined to be sceptical, we must try not to forget that our criticisms apply in general in just the same sort of way to observations of the normal bodily manifestations of living people as to the more or less abnormal manifestations on which we are passing judgment.

We may briefly sum up our discussion of immortality and survival as follows: The problem of immortality depends on the essential structure of reality (or at least of that part of reality which includes subjects of experience), and can therefore only be dealt with by investigating the general nature of experience. It then turns out that when a precise logical statement is given to the problem it is incapable

¹ Cf. Sir W. F. Barrett's book, *Psychical Research*, pp. 228 ff.

² The writer has discussed this point fully elsewhere. Cf. *Spiritual Pluralism and Recent Philosophy*, pp. 311 ff.

of solution, but this fact has only theoretical importance, for it follows from the statement arrived at that the problem has no concrete significance for the individual. The question of survival, on the other hand, is one of particular facts within experience, and can therefore only be considered in the light of empirical observation. The criterion to be applied to the results of this observation is essentially of the same nature as that applicable to analogous observations in everyday life. Bearing this in mind, the evidence obtained, especially from automatic script when the medium is not entranced, points very markedly in the direction of survival. There are, however, certain philosophical objections based on the nature of space and time, and the mode of manifestation therein of subjective action ; but these objections have practically an important bearing only in the case of purposeless apparitions or hauntings. Yet the importance we attach to the phenomena, and the mode of explanation we apply, must depend ultimately on the general metaphysical theory adopted. To the present writer, the facts appear to be illumined most clearly by the metaphysical hypothesis outlined in the preceding pages, namely, that of a plurality of individual spiritual agents constituting a universe in virtue of the immanence in them of a single universal ground.

REVIEWS OF BOOKS

The Psychology of the Future. By EMILE BOIRAC. (Kegan Paul, 10s. 6d. net.)

Monsieur Boirac is mainly concerned in this book with the formulation of a theory to explain the various psychical, or "parapsychic," phenomena, whose occurrence he believes to have been adequately demonstrated. A few actual records of experiments are included, but for the most part the author refers his readers to evidence given elsewhere, especially in his own earlier work, *Our Hidden Forces (La Psychologie Inconnue)*, and anyone who desires to form an independent judgment concerning M. Boirac's conclusions should read the two books in conjunction.

Briefly, M. Boirac seeks to explain psychic phenomena by the theory of "biactinism," to use the word which he himself has coined *ad hoc*. According to this theory the human organism possesses a power of radiation (the nature of which is admittedly still unknown), whereby it can in some way act upon other living organisms and inanimate objects, or be acted upon by them. The train of thought which has led M. Boirac to this conclusion is most apparent in his discussion of the supposed phenomenon of thought-transference, or diapsychism, as he prefers to call it.

"We cannot," he says (p. 229), "stop at the mere affirmation of the communication of two minds, in the phenomenon of the transmission of thought. Willingly or unwillingly, it is necessary to admit also *the intercommunication of two brains.*" (The italics are the author's.) And again (p. 228): "To attribute to thought and will the mystic property of communication from one mind to another without any physical connection between the brains where they have their natural conditions is to place ourselves definitely beyond the realm of science."

Surely this contention begs the whole question of the relation and interaction of mind and body. M. Boirac's conclusion would only follow from the assumption (which he does not appear to make) that man is a physical organism, and nothing more. If, as many competent psychologists hold, man has a mind, or psyche, which is capable of interacting with his body, what *a priori* reasons have we for assuming that the actions of this psychical element in man are "beyond the realm of science," and follow no ascertainable laws? Even if we incline to the idea that the

apparent gulf between the physical and the psychical is only apparent, and will eventually be bridged by our increasing knowledge of the ultimate constitution of matter, so that the action of the mind upon the body or upon another mind would be reducible to physical terms, even so we could not conclude, as M. Boirac does, that the intercommunication of two *minds* involves the direct intercommunication of two *brains*. The evidence put forward in support of the theory of thought-transference would appear to indicate that the mind possesses a power of acting at a distance in a manner inconsistent with the known laws of physical space. In the opinion of the present reviewer, if the evidence for thought-transference does not prove this, it proves almost nothing. We cannot single out for acceptance those cases which appear to lend colour to the theory of physical radiation and reject those equally well-attested cases which appear to run counter to it.

This theory of radiation is put forward by M. Boirac not only to explain phenomena whose occurrence is still more or less in dispute, such as thought-transference and clairvoyance, but also some of the generally accepted phenomena of hypnotic suggestion. Not that M. Boirac denies that suggestion actually occurs, but in his opinion two distinct phenomena have been erroneously attributed to this one cause. On the one hand, he maintains, there is suggestion, which may be hypnotic, or may be given to the subject in his normal state; on the other hand there is the phenomenon noted by the early Mesmerists under the term "animal magnetism," which consists in the radiation by a human organism of a "magnetic influence capable of acting upon another human organism."

The reader will naturally ask upon what evidence this theory is based. As has been indicated above, a good deal of the evidence upon which M. Boirac relies was given in his earlier book *Our Hidden Forces*. Some further corroborative incidents are, however, included in the volume now under discussion. For instance, the author relates (p. 165 ff.) how he tried an experiment upon a boy of sixteen who had never been experimented upon before, and knew nothing of what results might be expected.

"Certain signs made me suspect that the subject was particularly sensible to biactinic action. Therefore, in a second séance, after he was placed in a state of torpor, with his eyes closed, I tried to verify my conjecture. Seated in front of the subject . . . I slid my right foot slowly over the carpet, the toe pointing toward the subject's left foot. I noticed immediately a slight movement, a sort of tremor in his foot. Again I slid my right foot, very slowly and without noise; this time the subject's foot glided visibly toward mine. Then . . . this foot . . . was advanced by jerks over the carpet, and ended by leaving the ground and raising itself in the air, as if it were linked to mine—which was raised at the same time—by an invisible thread."

A variation of the experiment was then tried, M. Boirac placing his hand a few inches above the hand of the hypnotised subject and drawing it

slowly away, when the subject's hand was observed to follow the experimenter's movements. M. Boirac admits that "these experiments should be repeated in conditions which would permit of their being rendered more precise and more varied." But that he should put forward such incidents as affording even a *prima facie* case for the existence of an "unknown force" appears to indicate a lack of experimental precision. Two possible causes at once present themselves as alternatives to the theory of biactinic radiation—hyperæsthesia and thought-transference. The first of these, hyperæsthesia, appears to afford by far the simplest and most scientifically economical explanation of the incident quoted above; for hyperæsthesia is a well-established phenomenon of the hypnotic state. However careful M. Boirac was to make his movements imperceptible, a slight degree of hyperæsthesia is all that would be required to make the hypnotised boy aware of these movements, and, being in a suggestible state, he would be likely enough to imitate them.

Some other results quoted by M. Boirac, notably some of those obtained by Dr. Sydney Alritz of Upsala, are such as to make the hypothesis of hyperæsthesia more difficult of acceptance; they do not, however, exclude the possibility of thought-transference between the experimenter and the subject. One of the first rules in scientific experimentation (and M. Boirac lays great stress upon the importance of applying strict scientific methods to the problems he sets out to solve) is to isolate and control all the conditions of an experiment, so far as possible. Until M. Boirac and those who share his opinions have carried out experiments upon biactinic radiation under such conditions as render it extremely improbable that the observed results can be explained by the hypotheses of hyperæsthesia and thought-transference—more especially hyperæsthesia—the biactinic theory is not likely to find much general support amongst students of psychical phenomena.

The translation of M. Boirac's book, by Dr. W. de Kerlor, appears to be adequate, though it is sometimes clumsy. "We should like to know if the suggestionists have ever tried to be placed in the conditions which would permit them to constate these phenomena" is a sentence which will hardly commend itself to an English stylist.

H. DE G. SALTER.

The Road to En-dor. By LIEUT. E. H. JONES. (John Lane, 8s. 6d. net.)

This unusually interesting book describes how two officers attempted to escape from a Turkish prisoners-of-war camp, and finally worked their exchange, by means of counterfeit "spiritualistic" practices of the "glass and letters" variety. In spite of "tests," the author succeeded in persuading first his companions, and later the Turkish authorities, that he possessed genuine supernatural powers and was the medium for

communication of a "Spook" of uncommon consequence. By the clever utilisation of a local story of buried treasure the colleagues aroused the cupidity of the Turkish Commandant and "proved" their supernatural powers by the "discovery" of clues which they had previously prepared and secretly buried.

They thus achieved a complete ascendancy over this avaricious and credulous official, and succeeded in persuading him to send them to Constantinople to find the missing clues. Before he finally complied with this scheme they managed to obtain photographic evidence of his equivocal relations with themselves, and handed the proofs over to their fellow-prisoners as a safeguard against possible retaliation.

Circumstances arose which necessitated the abandonment of their original plans, and they accordingly decided to feign madness in order to effect their exchange. This they did with a thoroughness which included hanging themselves while *en route* for Constantinople—a feat which only just missed having fatal results. The story of how they evaded the vigilance of the German doctors is a wonderful story of ingenuity, pluck, and unwavering determination.

It is not unnatural that so successful a career as a fraudulent medium should have led Lieut. Jones to the conclusion that all mediums are equally fraudulent; but, although the description of the *modus operandi* is highly instructive, and doubtless to some extent relevant to the methods of the worst type of professional spirit-monger, it has no bearing on the evidential matter examined by serious students.

Lieut. Jones, gifted with uncommon ingenuity and remarkable visualising power, completely mystified his companions by the adroitness of his technique, but he produced no single item of evidence which would be acknowledged as such by a capable critic. Moreover, the tests imposed were very inadequate, and, even so, it was only the gross carelessness of his examiners which enabled him to pass them. He would probably be the first to admit that if he had been properly blindfolded and the letters had then been shuffled into an arbitrary and quite new order he would have failed at once.

W. WHATELY SMITH.

A Theory of the Mechanism of Survival. By W. WHATELY SMITH. (Kegan Paul, 5s. net.)

A book aimed, as this is aimed, at the ignorant but open-minded outsider, and not at the expert, may fairly claim to stand or fall by an unlearned rather than an authoritative criticism. That this is the Editor's view is clearly shown by his choice of a reviewer.

It is evident that two main pitfalls threaten the "popular" book. One is that the reader may lay it down knowing no more than when he

opened it ; the other is that he may know, or think he knows, far too much. Both these dangers, the Scylla of stodgy obscurity and the Charybdis of snappy, vote-catching dogmatism, are avoided in this work with conspicuous success. The application of four-dimensional geometry to the explanation of psychic phenomena is its object ; and its simple analogy, the definition of every technical term before its use, and the ever-recurring reminder that our evidence is flimsy and our hypotheses on trial, combine to form a strong antidote to the superstitions of the credulous and the inertia of the incurious who "are not meant to know these things."

There are defects in detail, idiosyncrasies of punctuation, a somewhat fortuitous perspective ; in condensing quotations it is notoriously difficult for one familiar with the subject to estimate how much will be obvious to the beginner. Again, Time is the most fundamental conception of the unlearned man : to tell him that he is wrong and then leave the subject may be good metaphysics, but it is bad policy. Better to leave him anchored to his rock-idea, or to cut his cable if it really fetters him to a delusion, than to take a casual slash at it and sail away. But these are little faults at worst ; and it is certain that when the open-minded outsider has repaired his cable, filled in some commas, and puzzled out with which pair of eyes the gentleman on p. 153 saw the back of his coat, he will find himself as open-minded as before, and a little less of an outsider. *Quod erat faciendum.*

W. HOPE-JONES.

Psycho-Analysis. By BARBARA LOW, B.A. With an Introduction by ERNEST JONES, M.D., L.R.C.P. (Allen and Unwin, Ltd., 5s. net.)

This book, by a lady member of the British Psycho-Analytical Society, represents the first British attempt to supply the General Reader who may desire to know what the new science stands for, and what are its methods and achievements, with a descriptive outline of the whole subject, free, as far as possible, from technical terms and from specific allusion to authorities—a list of whom, however, is appended to the book.

On the whole, the work has been satisfactorily done. It is well written ; it is easy to understand ; it is well digested : but it is too sketchy to serve any very real purpose. The introductory volume by the American psycho-analyst, Dr. Wilfrid Lay, entitled *Man's Unconscious Conflict*, covers the same ground at double the length, and is by no means too full. It is distinctly the better book of the two as a first introduction to the subject.

Miss Low limits her survey to the Freudian theory as developed by himself and some of his disciples, devoting 58 out of the 172 pages of her text to "Treatment by Psycho-Analysis" and to "Probable Social and Educational Results."

Proceedings of the Society for Psychical Research. Part lxxix.
4s. 6d. net.

The latest part of the *Proc. S.P.R.*, in addition to papers in memory of Lord Rayleigh and Sir William Crookes, by Sir Oliver Lodge and Sir William Barrett respectively, contains a discussion of the Doris Fischer case of Multiple Personality by Dr. T. W. Mitchell and an address on *The Psychological Foundations of Belief in Spirits*, by Dr. C. G. Jung, which was delivered to the Society in July, 1919.

Both these papers will amply repay careful reading by students of the subject, as also will the review of Dr. E. H. Jones' *Papers on Psycho-Analysis*, which follows them.

There can be no doubt that the future successful development of Psychical Research must depend on the application to its problems of the most modern psychological methods and discoveries—especially in the province of abnormal psychology; and it is satisfactory to note an increasing tendency on the part of "orthodox" psychologists and psychopathologists to recognise that many "psychical" phenomena should be included in their sphere of operations.

It is not too much to say that the whole question of Survival is really a matter of studying Secondary Personalities. The question which Psychical Researchers have to determine is whether the intelligences which purport to be discarnate and to communicate through a medium are, or are not, merely dissociated fragments of that medium's total personality. There can be little doubt that this is frequently the case. Dr. Stanley Hall, writing in the *American Journal of Psychology* for 1918, describes a very interesting and instructive case which recently came under his notice, and in which a young girl developed many of the commoner features of mediumistic powers for reasons which could, as it happened, be ascertained and were easily explained on orthodox psycho-pathological lines.

It seems probable that the powers of other mediums may have originated in the same way, and it is greatly to be hoped that, before long, the automatisms and trance-states which constitute mediumship will be subjected to an exhaustive study from the strictly psychological point of view.

In the last few years the psychologist's armoury has been immensely strengthened by the addition of those methods which are comprised under the term "Psycho-Analysis," and it should not be impossible to devise means which will definitely determine, for instance, whether "controls" are fragments of the medium's own personality or whether they differ sufficiently therefrom to warrant our conceding the separate existence which they claim.

The Doris Fischer case is especially interesting from this point of view, especially since one of the personalities claimed to be a separate entity, and Dr Mitchell's paper will be of considerable value to those who wish to get a bird's-eye view of the case without reading the two thousand and odd pages in which it was originally reported.